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THESIS

OVERCOMING CHALLENGES TO THE PROLIFERATION SECURITY INITIATIVE

by

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September 2004

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**OVERCOMING CHALLENGES TO THE PROLIFERATION SECURITY
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ABSTRACT

A U.S.-led naval operation in October 2003 interdicted a shipment of uranium-enrichment components on-board a German cargo ship traveling from Dubai to Libya. In December 2003, Libya announced it would halt its weapons of mass destruction (WMD) programs and eliminate its existing stockpiles under international verification and supervision. The George W. Bush Administration proclaimed the interdiction a triumph for the newly created Proliferation Security Initiative (PSI), an activity which was announced five months earlier to interdict, through the threat or actual use of force, land, sea, and air trafficking of WMD at the earliest possible point.

Despite increasing international support, numerous joint exercises, and the successful Libyan intercept, the PSI faces serious legal, intelligence, and operational challenges to sustained effectiveness. This thesis takes a close look at these challenges and considers how they can be overcome. I conclude that overcoming these challenges will require a multilateral trusted information network to augment secretive bilateral intelligence sharing, a PSI-specific legal umbrella to replace current reliance on only partially applicable international laws and resolutions, and an interoperable, team approach to operations that takes advantage of industry's technological improvements in detection technology and is conscious of air-intercept restrictions.

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I. INTRODUCTION

A. OVERVIEW

A U.S.-led naval operation in October 2003 interdicted a shipment of uranium-enrichment components on-board a German cargo ship traveling from Dubai to Libya.¹ The naval operation resulted in the seizure of thousands of uranium-centrifuge parts. Both American and British officials mark the interception of the ship, based on timely and accurate intelligence information, as the turning point in nonproliferation negotiations with Libya. On 19 December 2003, Libya announced it would halt its weapons of mass destruction (WMD)² development programs and eliminate stockpiles of weapons under international verification and supervision.³ The George W. Bush Administration proclaimed the interdiction as a triumph for the newly created Proliferation Security Initiative (PSI). First announced by President Bush at a speech in Krakow, Poland on 31 May 2003, the PSI is a response to the international spread of WMD, delivery systems, and related materials. It is a multi-national effort to interdict -- that is, cut off or prohibit through the threat or actual use of force -- land, sea, and air trafficking of WMD at the earliest possible point.⁴

Despite this successful Libyan interdiction, intelligence, legal, and operational challenges to future PSI effectiveness remain. This thesis identifies these challenges and provides prescriptions to overcome them. In this first chapter I discuss how the PSI fits into the nonproliferation puzzle and review to date accomplishments of the initiative. Chapter II stresses the importance of actionable intelligence to the PSI's success, and the challenge of multilateral intelligence sharing. Chapter III considers the legal framework

¹ The *BBC China* is a freighter owned by a German-based company, *BBC Chartering and Logistic GmbH*.

² WMD usually refers to nuclear, chemical, and biological weapons.

³ Samia Amin, "Recent Developments in Libya," Carnegie Endowment for International Peace (10 February 2004), <http://www.ceip.org/files/projects/npp/resources/Factsheets/libyaunconventionalweapons.htm>, last accessed Feb 04.

⁴ "Talking Points on the Proliferation Security Initiative," *FCNL Issues* (8 January 2004)" http://www.fcnl.org/issues/item.php?item_id=642&issue_id=34, last accessed Jan 04.

for the PSI and the challenges to the PSI's legal authority. Chapter IV reviews the operational challenges of ground, air, and sea interdiction, as well as the challenges of detecting different types of WMD. The concluding chapter issues a PSI report card, summarizes areas needing improvement, and recommends course of actions to address deficiencies.

B. KEY FINDINGS

I identify collection, sharing, issues of trust, and exercise restrictions as intelligence challenges to PSI effectiveness. The collection challenge is a byproduct of a Cold War reliance on satellite technology, and a lack of human intelligence sources. Bilateral agreements, restrictions on sharing intelligence and the secretive nature of intelligence agencies challenge PSI's multilateral sharing goals. Poor intelligence estimates of Iraq's WMD program have created distrust for U.S. and British intelligence services and challenge the credibility of PSI intelligence assessments. PSI exercises are currently using watered-down scripts due to intelligence sharing restrictions, which do not allow PSI partners to practice like they play. Overcoming these intelligence challenges requires a structured approach to intelligence sharing. A NATO-administered trusted information network with an onus on punishing violators is prescribed as a first generation structure for PSI intelligence sharing.

After establishing that the Libyan interdiction was more a result of unusual circumstances than a legal justification, I identify the lack of coverage of PSI interdiction principles in the UN International Law of the Sea (LOS) Convention and non-applicability of UN articles, resolutions, and statements as legal challenges to PSI effectiveness. The LOS Convention, the defining body of laws for maritime transit, does not restrict free passage of WMD related material in territorial waters. Article 51 of the UN Charter only allows for self-defense actions when armed attacks occur. Neither UN Security Resolution 1540 nor the UN Security Council Presidential Statement of 1992 specifically justifies offensive actions against WMD traffickers. I prescribe several options for overcoming the LOS Convention challenge, to include: operating outside the convention, changing the LOS, or creating a new treaty. I conclude the chapter by

arguing that legal questions regarding PSI interdictions will continue to plague the initiative until a PSI-specific UN Security Council Resolution is adopted.

Operational challenges to PSI effectiveness include interoperability, detection, and the use of force during air-intercepts. Training, tactics, and communication challenges can be overcome by adopting a team approach to interdiction operations similar to that of the U.S. Drug Enforcement Agency. Detection challenges require technological improvements in WMD detection capabilities and a PSI partnership with industry. The use of force during air-intercepts is a challenge that is best fought on the ground. While PSI participants can continue to practice air-intercepts, airport security and customs exercises would prove more worthwhile in the long-run.

C. WHY PSI?

The PSI is one of seven new measures proposed by President Bush to help combat the development and spread of WMD.⁵ The PSI has been presented as a global initiative without targeting any specific nation or organization. However, Under Secretary of State John Bolton has indicated that North Korea and Iran warrant the most attention because of the assumed maturity of their nuclear programs designed for weapons use.⁶ The PSI is designed to address a WMD proliferation problem that keeps growing, and the inability of current nonproliferation efforts to fully thwart this problem. The PSI fills a gap between the current treaty-based approach to nonproliferation and more assertive counterproliferation measures.

1. The Proliferation Problem

Willing proliferators, loopholes in existing nonproliferation regimes, and vulnerable materials and stockpiles have accelerated the WMD proliferation problem. Mohammed ElBaradei, International Atomic Energy Agency (IAEA) director, warns:

We are actually having a race against time which I don't think we can afford. The danger is so imminent...not only with regard to countries

⁵ WMD refers to a category that covers nuclear, biological, and chemical weapons that can result in massive amounts of destruction and loss of life.

⁶ "Talking Points on the Proliferation Security Initiative."

acquiring nuclear weapons but also terrorists getting their hands on some of these nuclear materials, uranium, or plutonium.⁷

Public warnings from the United Nations (UN) nuclear watchdog place an added emphasis on keeping WMD out of the hands of those inclined to use it. Alarming, these WMD materials continue to be bought and smuggled in numerous markets. The number of countries possessing WMD and related technology continues to increase. The following sections provide an estimate of current WMD proliferators and capabilities.

a. The Nuclear Problem

According to the Carnegie Endowment for International Peace, worldwide nuclear stockpiles are now estimated to total over 28,000 nuclear weapons; these include: 10,000 from the U.S., 17,000 from Russia, 410 from China, 350 from France, 185 from the U.K., 100 from Israel, 50-90 from India, and 30-50 from Pakistan.⁸ Adding to the list of current nuclear states and potential nuclear states are two prongs of the George W. Bush Administration's axis of evil, Iran and North Korea (see Figure 1).



Figure 1. Declared, de facto, and threshold nuclear states, from NNSA⁹

⁷ "Nuclear Terror Matter of Time," *BBC News* (21 June 2004), <http://news.bbc.co.uk/go/pr/fr/-/2/hi/americas/3827589.stm>, last accessed Jul 04.

⁸ "Nuclear Weapons," Carnegie Endowment for International Peace, <http://www.ceip.org/files/nonprolif/weapons/weapon.asp?ID=3&weapon=nuclear#useful>, last accessed Jul 04.

⁹ "Nuclear Weapon States," National Nuclear Security Administration (NNSA), <http://www.llnl.gov/nai/zdiv/weap.html>, last accessed Jul 04.

b. The Chemical Problem

A large number of chemical weapons states have abandoned their programs and destroyed their weapons since the establishment of the Chemical Weapons Convention (CWC).¹⁰ Yet, many countries have not joined the CWC. These include Egypt, Israel, North Korea, and Syria. China, Egypt, Iran, Israel, North Korea, and Syria are believed to have some quantities of undeclared chemical weapons. Sudan, India, and Pakistan are believed to have some capability to produce or have actively researched chemical weapons (see Figure 2).¹¹

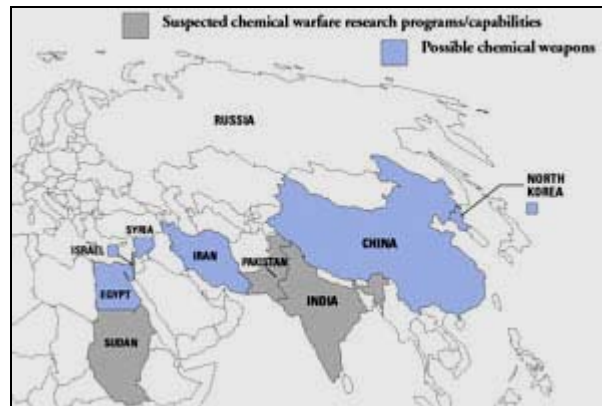


Figure 2. The world's chemical weapons states, from *Deadly Arsenals*¹²

c. The Biological Problem

Many nations gave up their biological warfare programs and destroyed their biological weapons stockpiles as a result of the Biological Weapons Convention (BWC). These countries include the United States, the United Kingdom, Canada, France, Germany, Japan, states of the Former Soviet Union, and South Africa.¹³ Russia continues to be the primary proliferation concern. Although Russian leadership claims to have

¹⁰ The Chemical Weapons Convention prohibits the development, production, stockpiling and use of chemical weapons. It was opened for signature in 1993, and entered into force in 1997. The Organisation for the Prohibition of Chemical Weapons (OPCW) in the Hague, established by the convention, is responsible for the implementation.

¹¹ "Chemical Weapons," <http://www.ceip.org/files/nonprolif/weapons/weapon.asp?ID=2&weapon=chemical>, last accessed Jul 04.

¹² Ibid.

¹³ The Biological Weapons Convention (BWC) prohibited the development, production, and stockpiling of bacteriological (biological) and toxin weapons and mandated their destruction. It was signed in Washington, London, and Moscow on 10 April, 1972, and entered into force on 26 March, 1975.

destroyed biological stockpiles, some may remain. Other states such as Israel, China, and North Korea may have the capability to produce significant quantities of biological agents for military use. Iran, Pakistan, India, Egypt, and Syria are suspected of trying to acquire the capability (see Figure 3).¹⁴



Figure 3. The world's biological weapons states, from *Deadly Arsenals*¹⁵

d. The Proliferation Network Problem

The scope of proliferation is expanding in the Middle East and East Asia with the development of new or improved chemical, biological, nuclear, and long-range missile programs. These weapons, which give potential adversaries the ability to respond asymmetrically in light of U.S. conventional superiority, also appear to be easier to acquire than was previously supposed. Recent discoveries shed light on the scope of Abdul Qadeer Khan's contributions to placing the world's most destructive weapons in the hands of known proliferation threats and non-state actors. Operating as the world's nuclear "Wal-Mart", the father of the Pakistani bomb turned out to be a global nuclear proliferator.¹⁶ The international network of suppliers he built to support uranium enrichment efforts in Pakistan also supported similar efforts in other countries. Khan and his network of suppliers were unique in being able to offer one-stop shopping for

¹⁴ "Biological Weapons", Carnegie Endowment for International Peace, <http://www.ceip.org/files/nonprolif/weapons/weapon.asp?ID=1&weapon=biological>, last accessed Jul 04.

¹⁵ Ibid.

¹⁶ Peter Brookes, "Nukes for Sale," *CNSNEWS.COM* (10 February 2004), <http://www.cnsnews.com> last accessed Feb 04.

enrichment technology as well as weapons design information. This allowed a potentially wide range of countries to leapfrog the slow, incremental stages of nuclear weapons' development programs.¹⁷

WMD acquisitions are not always the work of secret criminal networks that skirt international law. More often, they are done by businessmen, in the open, in what seems to be legal trade in high-technology. Biotechnology is especially dual-edged, easily supporting both medical programs and biological weapons.¹⁸ For example, various North Korean facilities¹⁹ can be construed as having a purpose that could contribute to an infrastructure for research as well as development of biological weapons.²⁰

Additionally, Russia and China continue to export WMD-related materials and technology. Although Beijing has taken steps to improve its export control, China continues to be a leading source of relevant technology and ballistic missile proliferation.²¹ Russian WMD materials and technology remain vulnerable to theft or diversion. According to Richard Lugar, chairman of the Senate Foreign Relations Committee:

Facilities at Shchuch'ye in western Siberia, containing some 1.9 million deadly nerve gas munitions, most of them small enough to fit into a briefcase, are stored in run-down wooden warehouses. At Pokrov, a former biological weapons facility, I saw vials of deadly pathogens used for vaccine research that could also be employed by terrorists. This operation needs to be better secured and downsized to reduce the risk. Russia still has 340 tons of inadequately secured fissile material, as well as 70 warhead facilities and 20 biological pathogen sites that need security improvements. We also need to tackle the problem of Russia's battlefield

¹⁷ "The Worldwide Threat 2004: Challenges in a Changing Global Context," *Testimony of Director of Central Intelligence George J. Tenet before the Senate Select Committee on Intelligence*, Central Intelligence Agency (24 February 2004), http://www.cia.gov/cia/public_affairs/speeches/2004/dci_speech_02142004.html, last accessed Sep 04.

¹⁸ Ibid.

¹⁹ These facilities include: The Institute and Syringe, Factory, Reagent Company, (Synthetic) Pharmaceutical Division of Hamhung Clinical Medicine Institute, Institute (Pyongyang), Pharmaceutical Plant (located approximately forty kilometers from P'yongyang), Kyong-t'ae Endocrinology Institute, and the Sanitary Quaranting Institute (germ vaccination institute).

²⁰ "North Korea Biological Profile," Center for Nonproliferation Studies at the Monterey Institute of International Studies, http://www.nti.org/db/profiles/dprk/bio/fac/NKB_Fo_GO.html, last accessed Jul 04.

²¹ "The Worldwide Threat 2004: Challenges in a Changing Global Context."

nuclear weapons, which pose an even greater terrorist risk than its strategic warheads because they are more portable and not as well guarded.²²

The vulnerability of Russian materials coupled with the eagerness of Russia's cash-strapped defense, biotechnology, chemical, aerospace, and nuclear industries to raise funds via exports and transfers, makes Russian materials an attractive target for countries and groups seeking WMD and missile-related assistance.²³ The continuation of the flow of WMD technology and materials represents a failure of the international nonproliferation regime and counterproliferation efforts that appear unprepared to fight at the crossroads of WMD radicalism and technology cited by the U.S. president.

2. WMD Trafficking Problem

According to the IAEA, from 1992 to 2002 more than one hundred and seventy-five attempts by terrorists or criminals to obtain or smuggle radioactive substances were recorded worldwide with most coming from former Soviet satellite states. The lack of standardized reporting protocols makes the full extent of such smuggling hard to ascertain. Because of this reporting problem, the IAEA stresses that the total number of attempts is likely much higher. For example, of the five hundred attempts documented by the Russian Customs Agency to smuggle radioactive materials across Russian national frontier in 2000, only one case was reported to the IAEA.²⁴

Efforts designed to combat the smuggling of WMD historically focus on nuclear or radiological components. That does not diminish to the likelihood of success that proliferators enjoy in smuggling chemical and biological materials. Once WMD material of any type is stolen, misplaced, or intentionally shipped it could be anywhere. Borders over which smugglers might travel stretch for thousands of miles, and millions of trucks, trains, ships, and airplanes cross legitimate international borders every year. To make

²² Richard Lugar, "Seize This Chance to Destroy Weapons," *Industry Star.Com* (1 August 2004), <http://www.indystar.com/articles/8/166592-6368-021.html>, last accessed Aug 04.

²³ Ibid.

²⁴ "Nuclear Smuggling, A First Step to Nuclear Terrorism," The Jewish Institute for National Security Affairs (19 August 2003), <http://www.jinsa.org/articles/articles.html/function/view/categoryid/170/documentid/2176/history/3,2360,652,170,2176>, last accessed Aug 04.

matters worse, officials tasked to guard these borders are often poorly paid, geographically isolated, and susceptible to corruption.²⁵

Using interdiction of drug trafficking as a measuring stick, it is easy to understand the challenge of stopping the smuggling of WMD. The United States is able to stop only twenty-five percent of the hundreds of tons of South American cocaine smuggled over its borders each year. The running joke is that the easiest way to bring nuclear, chemical, or biological material into the country would be to hide it in a bale of marijuana. Because the world is ever becoming more interconnected and borders are becoming more porous, every nation's border is vulnerable to the entry of destructive materials.²⁶

3. Attacking the Proliferation Problem in the Past

For five decades the proliferation problem has been attacked by an international treaty-based nonproliferation regime. Fifty years ago, President Dwight D. Eisenhower gave his "Atoms for Peace" address to the UN General Assembly. He proposed sharing nuclear materials and information for peaceful purposes through international agencies. That speech led to the creation of the IAEA several years later. Today, the IAEA has the dual responsibility to police peaceful nuclear programs, while ensuring they do not make nuclear weapons. The Nuclear Nonproliferation Treaty (NPT), signed in 1968, and entered into force in 1970, gave the IAEA authority to police the nuclear activities of member countries while ensuring those without nuclear weapons did not acquire weapons. Today, one hundred eighty seven states subscribe to the NPT.²⁷

The UN Security Council is assigned the role of enforcement of the major multilateral agreements. The IAEA acts under the UN Charter as the verification arm of the council. The performance of the council over the last ten years has been marked by inconsistency, self-interested decision making, and inability to force compliance.²⁸ One

²⁵ Anthony Wier, "Introduction: Interdicting Nuclear Smuggling," NTI (27 August 2002), http://www.nti.org/e_research/cnwm/interdicting/index.asp, last accessed Aug 04.

²⁶ Ibid.

²⁷ George Bunn, "The Nuclear Nonproliferation Treaty: History and Current Problems," *Arms Control Today* (December 2003), http://www.armscontrol.org/act/2003_12/Bunn.asp, last accessed Sep 04.

²⁸ Brad Roberts, "Revisiting Fred Ikle's 1961 Question, After Detection – What?," *The Nonproliferation Review* (Spring 2001), 19-20.

of the most damaging blows to the NPT was Iraq's demonstrated ability to hide its nuclear-weapon-making efforts from IAEA inspectors before the first U.S. / Iraqi Gulf War.²⁹ In addition, continued U.S. suspicion over the thoroughness of weapons inspections prior to Operation Iraqi Freedom (OIF) contributed to a decision for military intervention. The inspection program is hampered by the NPT itself. Article IV of the NPT allows for an "inalienable right" to all nuclear fuel-cycle technologies for peaceful purposes.³⁰ This makes the job of inspectors more difficult, making necessary the distinction between nuclear materials to be used for peace and those used for war.

Compliance problems with the NPT extend beyond rogue nations. In Article VI of the NPT, the United States and other recognized nuclear-weapon states promised to negotiate weapons reductions, with the goal of nuclear disarmament. The United States has since withdrawn from the Anti-Ballistic Missile (ABM) Treaty, and publicized its desire to integrate nuclear weapons at all levels of warfare in the 2001 Nuclear Posture Review (NPR).³¹ This has led other countries to criticize U.S. compliance with the NPT, which makes it more difficult politically to mobilize multilateral support for enforcing NPT compliance by potential rogue-state proliferators.

Similar efforts to control chemical and biological weapons proliferation, such as the CWC and BWC, also have resulted in mixed success. These treaties have made significant strides in eliminating stockpiles from participating countries, but have failed to deter the countries of most concern. Non-signatories to these conventions, such as China, North Korea, and Syria, retain the capability to produce significant quantities of chemical or biological agents and remain a proliferation concern.

4. Attacking the WMD Trafficking Problem in the Past

Prior to the introduction of the PSI in May of 2003, the United States along with the international community took some steps to deal with the WMD trafficking problem without specifically tackling every dimension it. Attention was focused on training,

²⁹ Bunn, "The Nuclear Nonproliferation Treaty: History and Current Problems."

³⁰ Joseph Cirincione and Jon Wolfsthal, "North Korea and Iran: Test Cases for an Improved Nonproliferation Regime," *Arms Control Today* (December 2003), http://www.armscontrol.org/act/2003_12/CirincioneandWolfsthal.asp, last accessed Sep 04.

³¹ Bunn, "The Nuclear Nonproliferation Treaty: History and Current Problems."

detection equipment, and cooperation among countries dedicated to interdicting WMD traffickers. Table 1 lists some of programs designed to stop the trafficking of nuclear, chemical, and biological materials.

| <i>Programs</i> | <i>Focus</i> |
|---|--|
| <i>U.S. Department of Energy Second Line of Defense</i> | <i>Installing radiation detection equipment to detect nuclear material passing through key ports and border crossings in Russia and other Newly Independent States (NIS) of the Former Soviet Union, train officials on the use of the equipment, and link that equipment to a communications system</i> |
| <i>U.S. Department of State Export Control and Related Border Security Assistance</i> | <i>Funds equipment, training, and legal and regulatory assistance to control illicit trafficking in nuclear and other WMD and related materiel in and around the NIS, as well as several other regions of the world</i> |
| <i>U.S. Department of Defense International Counterproliferation</i> | <i>Collaborates with the U.S. Customs Service and the Federal Bureau of Investigation to provide equipment and training to customs and law enforcement counterparts in the NIS and in Southern and Eastern Europe</i> |
| <i>U.S. Department of Defense Weapons of Mass Destruction Proliferation Prevention Program</i> | <i>Focuses on collaborating with internal and border security forces in key NIS states, especially those of Central Asia, to improve their ability to interdict smuggling not just at ports and customs checkpoints but along the whole length of these countries' land, air, and sea borders</i> |
| <i>IAEA and other international efforts to combat WMD smuggling</i> | <i>Includes educating officials on the problem, improving scientific capacity to detect WMD material and to determine where it came from, and fostering cooperation among those nations trying to interdict WMD smuggling.</i> |

Table 1. Programs Addressing Smuggling of WMD, *from NTI*³²

None of the programs in table 1 attack the heart of what the PSI intends to do, interdict weapons and materials in transit. The PSI is an attempt to go beyond the interdiction operations of the past that were tied to checkpoints, borders, and Soviet stomping grounds. While PSI accounts for these areas, its mission is to stop the transfer of WMD to anyone at any place and time. This means that interdictions can take place near borders and checkpoints or on the high seas and unrestricted airspace. Covering the

³² Wier, "Introduction: Interdicting Nuclear Smuggling."

areas proliferators may choose to use necessitates a level of international cooperation that can only be achieved through continuous joint training and exercises.

5. The PSI – Part of the Future Solution

The PSI complements the treaty-based nonproliferation regime of the past by focusing on stopping WMD in transit. PSI activities can fall under the treaty-based nonproliferation umbrella or more assertive military counterproliferation measures, depending on what the activity actually entails. According to the U.S. Office of the Secretary of Defense (OSD), the PSI includes diplomacy and interdiction.³³

a. The PSI as Diplomacy

By building international support regarding the importance of stopping the flow of WMD to rogue-states and non-state actors, the PSI is institutionalizing and creating a norm to stop transfers and transactions of WMD programs. This norm calls on each PSI core member and supporter to contribute based on its own ability and legal authority. Paragraph 10 of the April 2004 UN Security Council Resolution 1540 supports the formation of this norm by “calling on all States, in accordance with their national legal authorities and legislation and consistent with international law, to take cooperative action to prevent illicit trafficking in nuclear, chemical, or biological weapons, their means of delivery, and related materials.”³⁴

John Bolton, the U.S. State Department’s diplomatic face of the PSI, spearheads an effort that has landed 15 core PSI members and over 60 supporting countries. This multilateral diplomatic focus supports the U.S. 2002 *National Strategy to Combat Weapons of Mass Destruction*, which states:

The United States will actively employ diplomatic approaches in bilateral and multilateral settings to dissuade supplier states from cooperating with proliferating states. Countries will be held responsible for their commitments, nonproliferation coalitions will be formed, and increased

³³ Interviews with officials in the U.S. Office of Secretary of Defense, Jul 04, name(s) withheld by request.

³⁴ “United Nations Security Council Resolution 1540,” UN Security Council (28 April 2004), http://www.un.org/Docs/sc/unscl_resolutions04.html, last accessed Sep 04, 3-4.

support for nonproliferation and threat reduction cooperation programs will be sought.³⁵

The participants willing to take responsibility for a share of the nonproliferation load bring different capabilities to the table. The PSI adds a political imperative to cooperate, enhancing multilateral sharing, and bridging in-transit nonproliferation gaps that were previously left open. It is intended to avoid the need for unanimous support, enabling smaller coalitions to take action.

b. The PSI as Interdiction

The PSI's focus on interdicting WMD shipments is also supportive of the 2002 National Strategy, which states:

Effective interdiction is a critical part of the U.S. strategy to combat WMD and their delivery means. We must enhance the capabilities of our military, intelligence, technical, and law enforcement communities to prevent the movement of WMD materials, technology, and expertise to hostile states and terrorist organizations.³⁶

Effective interdiction does not always equal military interdiction. According to OSD officials, PSI interdictions will not always include military action, and may more closely resemble the law enforcement model utilized in stopping in-transit drug smuggling.³⁷

By interdicting WMD shipments, the PSI triggers deterrence by denial. The threat that a shipment will be stopped and potentially seized should act as a deterrent to potential WMD suppliers and recipients. For suppliers, seizure could lead to embarrassing exposure with the possibility of political, economic, or military sanctions by PSI member states. For recipients, interdiction risks exposing what in most cases are covert programs to build a secret WMD capability. This exposure could trigger responses from a variety of international organizations and state actors, to include

³⁵ "National Strategy to Combat Weapons of Mass Destruction (Dec 02)," https://itwarrior.nps.navy.mil/exchange/hnwarden/Thesis/WMD%20docs.EML/National_Strategy_to_Combat_WMD.pdf?attach=1, last accessed Jul 04, 3-4.

³⁶ Ibid., 2.

³⁷ Interviews with officials in the U.S. Office of Secretary of Defense.

inspections, sanctions, or military action.³⁸ The deterrent nature of PSI interdiction also supports the 2002 national strategy, which states:

We require new methods of deterrence. A strong declaratory policy and effective military forces are essential elements of our contemporary deterrent posture, along with a full range of political tools to persuade potential adversaries not to seek or use WMD.³⁹

President Bush, PSI supporting states, and now the UN Security Council have declared that transport of nuclear, chemical, and biological weapons will not be tolerated. By taking disorganized efforts to interdict WMD shipments and giving them a multilateral structure, the PSI attempts to build a deterrent to transporting these shipments.

D. PSI PARTICIPANTS

On 12 June 2003, the first PSI meeting notes identified core PSI participants as: Australia, France, Germany, Italy, Japan, Netherlands, Poland, Portugal, Spain, the United Kingdom, and the United States. In the first meeting, participants also expressed the desire to broaden support for and, as appropriate, participation in the PSI. This broadened support would include all countries prepared to play a role in proactive measures to interdict shipments of WMD and related materials.⁴⁰ Following the third PSI meeting on 3-4 September 2003, the 11 participants approached other countries to seek support for interdiction principles agreed upon during the meeting. Thus far, over sixty countries have expressed support for the principles. Notes from the fourth meeting included the statement that PSI participation would vary with the activity taking place, and the contribution the participants could provide.⁴¹

On 11 February 2004, President Bush revealed the first expansion of the initiative during a speech at the National Defense University, in which he outlined U.S. proposals to stop proliferation. “Three more governments—Canada and Singapore and Norway—

³⁸ Andrew Winner, “The PSI as a Strategy,” *The Monitor*, (Spring 2004, Vol. 10, No. 1), 10.

³⁹ “National Strategy to Combat Weapons of Mass Destruction,” 3.

⁴⁰ “Proliferation Security Initiative: Chairman’s Statement at the First Meeting,” U.S. State Department, <http://www.state.gov/t/np/rls/other/25382pf.htm>, last accessed Mar 04.

⁴¹ “Proliferation Security Initiative: Chairman’s Conclusions at the Fourth Meeting,” U.S. State Department, <http://www.state.gov/t/np/rls/other/25373pf.htm>, last accessed Mar 04.

will be participating in [PSI],” the president said.⁴² These states, as well as Denmark and Turkey, attended a Washington-hosted PSI meeting (the fifth) in December.

The first anniversary meeting of the PSI on 31 May 2004 brought a welcome gift. Russia, which had remained cool to the PSI out of concern that interdicting cargo in transit did not square well with universally accepted transit laws, became PSI’s fifteenth core member. John Bolton is excited about Moscow’s participation, noting: “Russia is a great naval power and it has extensive land and airspace that can be used for commercial activities, which we hope and expect, will now be closed to proliferators.”⁴³ Russia’s membership signifies acceptance of PSI interdiction principles, but not without reservation. Moscow’s unease has not disappeared. In a 1 June 2004 statement, Russia’s Ministry of Foreign Affairs asserted, “We presume that activity under this initiative should not and will not create any obstacles to lawful economic, scientific, and technological cooperation of states.”⁴⁴

With Russia on-board, Bolton will now likely turn his attention to China. State Department spokesperson Richard Boucher said on 17 February 2004, “we have seen progress by China on proliferation issues, and they are very interested in the Proliferation Security Initiative.”⁴⁵ However, Beijing offers a much less optimistic view of the initiative, citing concerns with the legality of interdiction on the open seas. In a 12 February 2004 press conference, Chinese Foreign Ministry spokeswoman Zhang Qiyue responded to a question about the PSI by stating, “We believe that the issue of proliferation shall be resolved through political and diplomatic means within the framework of international laws, and all nonproliferation measures shall contribute to

⁴² Wade Boese, “Proliferation Security Initiative Advances: But China and Russia Keep Their Distance,” *Arms Control Today* (March 2004).

⁴³ Wade Boese, “Russia Joins Proliferation Security Initiative,” *Arms Control Today* (July/August 2004).

⁴⁴ Ibid.

⁴⁵ Peter Kerr and Wade Boese, “China Seeks to Join Nuclear, Missile Control Groups,” *Arms Control Today* (March 2004).

peace, security, and stability in the region and the world at large.”⁴⁶ As of July 2004, China is still not a PSI member, but is no longer publicly criticizing PSI.

The U.S. State Department does not envision or support regular meetings of the PSI core countries but contends that it may be useful or necessary to have various PSI participating states meet periodically to exchange information or to refine details about the initiative. In addition, regular meetings of expert working groups (operational, intelligence and political), in the United States are expected in the future.⁴⁷

E. PSI RESULTS TO DATE

PSI participants have agreed on guidelines for information sharing, documented governing interdiction principles, and taken part in multilateral training exercises. In addition, the PSI has been credited with the interdiction of a cargo ship containing WMD materials.

1. Information Sharing

At the September 2003 PSI meeting in Paris, participants agreed to the following general guidelines for information exchange:

- Countries commit to seek to release information to other PSI participants to facilitate timely sharing of information to identify, monitor, disrupt or interdict proliferation activities of concern.
- Countries will release information to other PSI participants, and receiving countries agree to accept information in accordance with existing national rules of release of operationally sensitive information or intelligence to third parties.
- Countries agree not to release any information received from a PSI country for PSI purposes to a third party, including other PSI countries, without the specific consent of the originating country.
- Countries agree to afford protection to any information received from a PSI country for PSI purposes at substantially the same level it would receive in the originating country.

⁴⁶ Ibid.

⁴⁷ “Proliferation Security Initiative Frequently Asked Questions (FAQ),” U.S. State Department (24 May 2004), <http://www.state.gov/t/np/rls/fs/32725.htm> last accessed Jul 04.

- Countries agree to provide feedback on PSI operations conducted as a result of information supplied by another PSI country to the originating country.⁴⁸

Though initially addressed by these guidelines, intelligence and information sharing remain a major challenge to the effectiveness the PSI's multilateral nonproliferation effort. According to officials at the U.S. Center for Weapons Intelligence, Nonproliferation and Arms Control (WINPAC), the PSI is not intended to be an intelligence sharing forum.⁴⁹ It is unlikely that PSI interdictions will involve more than a handful of countries at a time due to established intelligence sharing restrictions.

2. Interdiction Principles

At the third meeting the participants also agreed to the following four governing principles of interdiction which call on states concerned about proliferation to:

- Take steps to interdict the transfer or transport of WMD, delivery systems, and related systems to and from states and non-state actors of proliferation concern;
- Adopt streamlined procedures for rapid exchange of information regarding suspected proliferation activity;
- Strengthen both national legal authorities and relevant international law to support PSI commitments; and
- Take specific actions to support interdiction of cargoes of WMD, delivery systems, and related materials consistent with national and international laws, including not transporting such cargoes, boarding and searching vessels flying flags that are reasonably suspected of carrying such cargoes, allowing authorities from other states to stop and search vessels in international waters, interdicting aircraft transiting sovereign airspace that are suspected of carrying prohibited cargoes, and inspecting all types of transportation vehicles using ports, airfields, or other facilities for the transshipment of prohibited cargoes.⁵⁰

⁴⁸ "Proliferation Security Initiative: Statement of Interdiction Principles," U.S. State Department, <http://www.state.gov/t/us/rm/23801pf.htm>.

⁴⁹ Interviews with officials at WINPAC, Jul 04, name(s) withheld by request.

⁵⁰ Baker Spring, "Harnessing the Power of Nations for Arms Control: The Proliferation Security Initiative and Coalitions of the Willing," *The Heritage Foundation* (18 March 2004), 2-3.

Like information sharing, the multilateral operational aspect of the interdiction principles remains a major challenge to the effectiveness of the PSI. The interdiction principles have remained unchanged since their inception, with now over sixty countries supporting them.

3. Training Exercises

To help overcome operational challenges, PSI members have undertaken ten training exercises between the adoption of the interdiction principles and June 2004:

| Proliferation Security Initiative (PSI) Exercises | | |
|--|--|---|
| September 10-13, 2003 | | Exercise PACIFIC PROTECTOR: Australia-led maritime exercise conducted in the Coral Sea |
| October 8-10, 2003 | | Air CPX: United Kingdom-led air-interception command post (tabletop) exercise conducted in London, UK |
| October 13-17, 2003 | | Exercise SANSONO 03: Spain-led maritime exercise conducted in the Western Mediterranean |
| November 25-27, 2003 | | Exercise BASILIC 03: France-led maritime exercise conducted in the Western Mediterranean, |
| January 11-17, 2004 | | Exercise SEA SABER: United States-led maritime exercise conducted in the Arabian Sea, U.S. |
| February 19, 2004 | | Exercise AIR BRAKE 04: Italian-led air-interception exercise conducted over Italy (Trapani) |
| March 31-April 1, 2004 | | Exercise HAWKEYE: Germany-led customs exercise conducted in Germany (Frankfurt Airport) |
| April 19-22, 2004 | | Exercise CLEVER SENTINEL: Italy-led maritime exercise conducted in the Mediterranean |
| April 19-21, 2004 | | Exercise SAFE BORDERS: Poland-led ground interdiction exercise conducted in Poland (vicinity Wroclaw) |
| June 23-24, 2004 | | Exercise APSE 04: France-led simulated air-interception exercise |

Table 2. PSI Exercises, from U.S. Department of State⁵¹

The exercises thus far have been worthwhile but need to be more robust. They were initially scheduled for public relations to show that the PSI was more than diplomats sitting around a table. PSI members wanted their image to be operational right from the start. Ground, maritime, air-interception, and international airport training exercises planned in the future suggest PSI nations are taking seriously the complex nature of

⁵¹ "Calendar of Events," U.S. State Department, <http://www.state.gov/t/np/c12684.htm>, last accessed Jul 04.

interdicting WMD, and are endeavoring to exercise all conceivable aspects of possible interdictions. Future exercises, now planned through 2006, will increase in the complexity of intelligence sharing, legal authorities, and political decision-making.⁵² A summary of exercise objectives and lessons learned is included in chapter four.

4. Interdictions

While PSI exercises and training continue, the participating states have already undertaken interdiction operations. PSI participants contend these cases will be announced and discussed with the public in only a few cases. An important, publicly announced case concerned the interdiction of a German-owned ship, tracked from Dubai, bound for Libya. Centrifuges used for producing nuclear weapons through highly enriched uranium were found on-board the ship. Two months after the interdiction, Libya announced its intention to terminate all WMD programs and research. On the surface, the Libyan WMD interdiction appears to be a success story for the PSI. Chapter three of this thesis argues that the intercept may have been more a factor of luck (the right players at the right time) or deliberate distribution of intelligence by the Libyan government.

It is unlikely that future interdictions will be labeled PSI or non-PSI. What is more likely is that the PSI's structure will facilitate interdictions on a case-by-case basis where the involvement of PSI core member states and those states supporting the interdiction principles will vary. Any interdiction involving a PSI member or supporter can in essence be claimed as a victory for the PSI. With the growing list of PSI supporters, it would be tough to fathom a future WMD interdiction without ties to the foundation being laid by the PSI today.

F. CONCLUSION

On 31 May 2003 President Bush proposed the PSI in general terms to the Group of Eight (G-8) during a summit in Poland. Specifically he said:

When WMD or their components are in transit, we must have the means and authority to seize them. So today I announce a new effort to fight

⁵² Interviews with officials in the U.S. Office of Secretary of Defense.

proliferation call the PSI. The United States and a number of close allies, including Poland, have begun working on new agreements to search planes and ships carrying suspect cargo and to seize illegal weapons or missile technologies. Over time, we will extend this partnership as broadly as possible to keep the world's most destructive weapons away from our shores and out of the hands of our common enemies.⁵³

Now, more than a year later, the PSI resume includes: 7 international meetings, 15 core members, over 60 supporters, published interdiction principles and information sharing guidelines, 10 multilateral training exercises, and credit for an operational interdiction tied to the dismantling of Libya's WMD program.

President Bush has rallied around the initiative he announced over a year ago. He continues to publicly support the initiative and praises its utility at every conceivable opportunity. The current momentum of the PSI makes it likely to survive the next presidential election, even if it is under a new name. Future PSI success will be a factor of the availability of actionable intelligence, legal authority, and operational capability to interdict WMD shipments. The intelligence, legal, and operational challenges to the PSI are the focus of the next three thesis chapters.

⁵³ Spring, "Harnessing the Power of Nations for Arms Control: The Proliferation Security Initiative and Coalitions of the Willing," 2.

II. INTELLIGENCE CHALLENGES

A. INTRODUCTION

According to former CIA Director George Tenet, “Intelligence has never been more important to the security of our country.”⁵⁴ Intelligence failures are blamed for the destruction of the World Trade Center on 11 September 2001. At the same time, critical and timely intelligence is credited with the PSI’s most important accomplishment thus far, seizing WMD materials on-board the *BBC China*.⁵⁵ According to the *U.S. National Strategy to Combat Weapons of Mass Destruction*, the highest U.S. intelligence priority is “a more accurate and complete understanding of the full range of WMD threats.”⁵⁶ Accurate intelligence allows PSI participants to prevent proliferation and deter or defend against known proliferators and terrorist threats. This intelligence is the key to developing effective counter and nonproliferation policies and capabilities. Emphasis on improving intelligence regarding WMD-related facilities and activities, proliferation markets, and means of transit is crucial to the mission of the PSI.⁵⁷

Together, the core participants in the PSI certainly have the military power and logistical reach to confront any enemy, virtually anywhere on the earth. But only intelligence can provide forewarning and pinpoint the time, place, and means of WMD transit needed for a successful interdiction.⁵⁸ PSI participants will only be able to act in concert with the international community when they can present objective and conclusive proof of the need to intercept a suspect shipment. This proof will help avoid erroneous judgments and international disagreements over weapons capabilities and intentions.⁵⁹

⁵⁴ Richard Coffman, “Intelligence and WMD,” *Military.Com* (18 February 2004), http://www.military.com/NewContent/0,13190,Coffman_021804,00.html, last accessed 1 Aug 04.

⁵⁵ The *So San* was a German-owned cargo ship intercepted by PSI participants in October 2003.

⁵⁶ “National Strategy to Combat Weapons of Mass Destruction,” 5.

⁵⁷ *Ibid.*, 5-6.

⁵⁸ Coffman, “Intelligence and WMD.”

⁵⁹ Andrew Prosser and Herbert Scoville, “The Proliferation Security Initiative in Perspective,” <http://www.cdi.org/pdfs/psi.pdf>, last accessed Jul 04.

This thesis chapter examines the intelligence challenges to future PSI effectiveness. I first look at the importance of sharing intelligence as a mechanism to combat WMD proliferators. Next, I consider the limitations of intelligence and the expectations of PSI participants regarding its use. I then scrutinize the U.S. Intelligence Community, the world's most powerful intelligence apparatus, as means to help identify intelligence challenges facing the PSI. Collection, information-sharing, trust, and exercise constraints are identified and discussed as the challenges. Finally, I prescribe a first generation trusted information network under the care of NATO, as an initial PSI intelligence sharing structure to combat these challenges.

B. WHY SHARE INTELLIGENCE?

With the onus for PSI success resting largely on the shoulders of the intelligence community, the intelligence-sharing component of PSI should be its focus. A recommendation from the recently released *9 / 11 Commission Report* stresses the importance of information sharing: "Information procedures should provide incentives for sharing, to restore a better balance between security and shared knowledge."⁶⁰ Sharing information will allow the PSI to utilize the strength of collaboration, filling gaps where unilateral intelligence is incomplete. John Bolton has at numerous times highlighted the importance of sharing intelligence to PSI success, the latest being in reference to Russia. In a May 04 interview, Bolton explained: "We expect that our intelligence sharing and law enforcement and military assets working with the Russian Federation will make a major contribution to our effort to interdict WMD trafficking worldwide."⁶¹ Bolton's statement rings of multilateral cooperation, but the challenges of sharing intelligence, discussed later in this chapter, have limited the progress toward this cooperation.

⁶⁰ "Final Report of the National Commission on Terrorists Attacks upon the United States, Official Government Addition," *9 / 11 Commission Report*, <http://www.gpoaccess.gov/911/index.html>, last accessed Aug 04, 417.

⁶¹ "Press Conference on the Proliferation Security Initiative," U.S. State Department (31 May 2004), <http://www.state.gov/t/us/rm/33556pf.htm>, last accessed May 04.

The Group of Eight (G-8)⁶² also recognizes the importance of intelligence sharing to combat the proliferation of WMD. During an 11 May 2004 meeting, the G-8 agreed to push for enhanced sharing of intelligence to fight the war on terrorism. The agreement calls for countries to “pass legislation if necessary to ensure that terrorism information can be shared internally with police and prosecutors and externally with other countries.”⁶³ This agreement underscores the necessity of PSI participants to share resources and disband current barriers that minimize country-to-country information exchange. Even the most robust information exchange environment will be subject to inherent limitations of intelligence, thus lowering expectations for intelligence timeliness and reliability.

C. INTELLIGENCE LIMITATIONS AND PSI EXPECTATIONS

The utility of intelligence is limited by assumptions used to gather it, preferences of people using it, and complexity of the information itself. Taking these limitations into account, PSI participants should not expect actionable intelligence for every conceivable WMD shipment. What can be expected are improvements to the current system, reliable assessment of intelligence accuracy, and robust intelligence sharing among PSI core members.

1. Limitations

Intelligence suffers from a number of potential weaknesses that tend to undercut its utility in the eyes of decision-makers. First, is the fact that a certain amount of intelligence may be no more sophisticated than current conventional wisdom. While conventional wisdom is usually dismissed out of hand, more is expected from intelligence. Second, analysis is sometimes so dependent on technical data collection that it misses important intangibles. For example, a straightforward analysis of the likelihood of thirteen colonies defeating the mighty British of the Eighteenth Century would have

⁶² The purpose of the G8, formally the Group of 7 is for the leaders of the world’s major industrial nations to meet to discuss the issues facing the world in an informal setting. The group first met in 1975 in Rambouillet, France. Its members include: the United States, France, Russia, the United Kingdom, Germany, Japan, Italy, and Canada. The European Union attends the annual G8 Summit as an official observer.

⁶³ “G-8 Ministers Want Intelligence Sharing,” *NewsMax Wires* (12 May 2004), <http://www.newsmax.com/archives/articles/2004/5/11/225427.shtml>, last accessed Aug 04.

deemed it near impossible. Third, assuming that other states or individual actors will act as you do can undermine analysis. For example, no U.S. policymaker would conceive of Japan bombing Pearl Harbor in December of 1941. Fourth, policy makers, are free to reject or ignore the intelligence they are given.⁶⁴ Policymakers want analysis to help them make informed decisions but often seek intelligence that supports their preferences, and ignore or even rebut intelligence and offer their own analysis.

In descriptions of the intelligence process, the process may appear more rational and coherent than it actually is.⁶⁵ The seven step process described by Mark Lowenthal in his book *Intelligence: from Secrets to Policy* is an oversimplified version of what actually takes place.⁶⁶ In reality, intelligence includes a matrix of interconnected, mostly autonomous functions. Policy decisions are sometimes inconsistent with the intelligence process. There are times when the political motivations of the policymaker and a variety of ideological and organizational distortions infect the process. Additionally, important intangibles may dramatically change the conditions of a given process.⁶⁷ Thus, the intelligence process is wrought with additional variables that alter the inputs and outputs to the process, making its use suspect at times. A formal review of U.S. intelligence, begun in June of 2003 by the Senate Select Committee, reported:

Intelligence analysis is not a perfect science and we should not expect perfection from our intelligence community analysts. It is entirely possible for an analyst to perform meticulous and skillful analysis and be completely wrong. Likewise, it is also possible to perform careless and unskilled analysis and be completely right. While intelligence is not an analytical function, it is the foundation upon which all good analysis is built.⁶⁸

⁶⁴ Mark Lowenthal, *Intelligence: From Secrets to Policy*, 2nd Ed. (Washington: CQ Press, 2003)42-43.

⁶⁵ Peter Gill, *Policing Politics: Security Intelligence and the Liberal Democratic State* (Great Britain: Cass, 1994), 135.

⁶⁶ Lowenthal's seven phases include: identifying requirements, collection, processing and exploitation, analysis and production, dissemination, consumption, and feedback.

⁶⁷ Lowenthal, *Intelligence: From Secrets to Policy*, 2nd Ed., 135.

⁶⁸ "Report on the U.S. Intelligence Community's Prewar Intelligence Assessments on Iraq," Select Committee on Intelligence, U.S. Senate (7 July 2004), <http://www.gpoaccess.gov/serialset/creports/iraq.html>, last accessed Jul 04, 4.

Being wrong about WMD trafficking is a scary proposition. If perfection cannot be expected, as noted by the Senate Select Committee, then what can PSI partners expect from the intelligence community?

2. Expectations

Real-time perfect knowledge of all WMD trafficking is a mountain PSI partners will likely never climb. A more realistic intelligence expectation includes improvement, assessment, and transparency. First, PSI partners should expect intelligence agencies to learn from Iraqi failures and improve suspect procedures. A recent Congressional report on the October 2002 U.S. intelligence assessment of Iraqi WMD capabilities highlights several fallacies within the U.S. intelligence system that contributed to a mischaracterization of the intelligence prior to the 2003 U.S. war with Iraq. These fallacies include: inaccurate or inadequate explanation of uncertainties behind judgments in the intelligence estimate; “group think” among the intelligence community leading analysts, collectors, and managers to interpret ambiguous evidence as conclusive indications of a WMD program; a “layering effect” whereby assessments were built on previous judgments, carrying forward uncertainties as facts; analytic or collection failures resulting from inadequate supervision and loss of objectivity; significant shortcomings in almost every aspect of the intelligence community’s human intelligence collection efforts; and abuse by the Central Intelligence Agency (CIA), particularly in terms of information sharing.⁶⁹ PSI partners can expect increased emphasis and resources to be applied to these problem areas, minimizing the likelihood of faulty intelligence to the level experienced with Iraq’s WMD program.

Second, PSI partners should expect a level of assurance of intelligence reliability commensurate with the decision to use force. Because any planned PSI interdiction could escalate into the use of military force upon non-compliance, the accuracy of the information must be unquestioned. Intelligence analysts must be ready to attach a level of assurance to their analysis. Intelligence agencies must honestly assess the validity of their information. PSI partners cannot expect all intelligence to be one-hundred percent

⁶⁹Ibid., 14-29.

correct, but should expect information sold by the intelligence community as highly reliable to be so.

Third, PSI partners should expect a high level of information sharing within the intelligence agencies of established core members. An initiative, sold internationally as a multilateral approach to WMD trafficking, to include established information sharing guidelines, must include the best each member's intelligence assets have to offer. An intelligence assessment offered to PSI decision-makers should be expected to be a product of shared information between all parties involved in the planned interdiction. PSI interdiction failures due to lack of sharing cannot be tolerated. Much of the sharing burden will be placed on the United States.

D. CURRENT SITUATION

The United States has the most capable intelligence apparatus of any country in the world, let alone any PSI participant. The information produced by the United States provides a substantial advantage in understanding world events and making difficult decisions.⁷⁰ Inasmuch as this information is useful to other PSI members, it is not surprising that the United States drives the intelligence train for the PSI. The U.S. intelligence community is the backbone of PSI intelligence capabilities; U.S. cooperation with other countries and multinational organizations dictates the type and amount of intelligence to be shared; and U.S. spokesmen provide the voice of PSI's intelligence sharing efforts.

1. Bilateral Agreements

Historically, the United States has been willing to form cooperative agreements where it shares common interests and concerns. Even where the interests of the U.S. and another country do not entirely converge, these relationships have proven mutually beneficial. Bilateral cooperation almost always involves sharing intelligence and analysis on topics of mutual interest.⁷¹

⁷⁰ "International Cooperation," <http://www.access.gpo.gov/int/int016.html>, last accessed Jul 04.

⁷¹ "International Cooperation."

U.S. bilateral agreements allow countries without technical capabilities to reciprocate in many other ways. In some cases it is geographical coverage, in some it is skill and expertise the U.S. would have to otherwise develop, and in others it is financed capabilities that have spared U.S. taxpayers considerable costs.⁷² Several such agreements are listed below.

- Another country may agree to undertake collection and / or analysis in one area and share it with the U.S. in return for U.S. reciprocation in another area
- Another country may permit the U.S. to use its territory for collection operations in return for the U.S. sharing the results of such collection
- The U.S. may help another country acquire a collection capability for its own purposes with the understanding that the U.S. will be permitted to share in the results
- Joint collection operations may be undertaken with U.S. intelligence officers working side-by-side with their foreign counterparts
- Exchanges of analysts or technicians between the U.S. and other services may occur
- The U.S. may provide training in return for services rendered by the foreign service⁷³

These bilateral agreements can serve the purpose of U.S. interests, but fall short of the PSI information exchange guidelines discussed in Chapter one of this thesis. These bilateral relationships can also be problematic. At times they necessarily involve relationships with governments or individuals with questionable moral or ethical standards. Maintaining relationships with these governments or individuals puts the United States at risk of becoming guilty by association.⁷⁴

2. Cooperation with Multinational Organizations

Historically, the United States has been able to share some intelligence or information derived from intelligence in multilateral organizations. For example,

⁷² Ibid.

⁷³ Ibid.

⁷⁴ Ibid.

intelligence is shared with North American Treaty Organization (NATO) member countries on a limited and classified basis.⁷⁵ Sharing information with the UN has been more tentative. The nature of the organization itself, and the lack of an effective system to control UN information, puts intelligence sources and related operations at risk. The United States provides the UN with the majority of its information, and other nations reportedly contribute very little.⁷⁶ Multinational organizations do not currently provide the PSI with a means of funneling information to core members. The United States is hesitant to utilize the inherent advantages of the multinational organizations, due in large part to the secretive nature of U.S. intelligence.

3. What is Said vs. What is Done

At the September 2003 PSI meeting in Paris, PSI participants agreed to general guidelines concerning the release, acceptance, and protection of shared information as well as feedback on PSI operations fueled by the information. This agreement appeared to signify the dawn of a new era in information sharing. John Bolton's public statement in a June 2004 interview supports these guidelines:

Most of the information concerning such (WMD) shipments would of necessity come through intelligence sources and methods, which makes immediately obvious the need for at least bilateral and frequently multilateral government cooperation. Intelligence services, law enforcement authorities and even military forces from several governments could easily be involved in a single operation.⁷⁷

This statement, suggests the PSI is taking major steps in bilateral and multilateral intelligence sharing, using all PSI assets, such as Russia, to aid in the effort to interdict WMD. This message may be going out on the news wires, but the U.S. intelligence community is not buying in.

According to an interview conducted with officials at WINPAC, the PSI is not intended to be an intelligence sharing forum. Although the PSI has created interest on

⁷⁵ Ibid.

⁷⁶ Ibid.

⁷⁷ "Bolton Calls Proliferation Initiative a Growing Reality," *Daily Washington File* (2 June 2004), <http://www.usembassy.ro/WF/300/04-06-02/eur308.htm>, last accessed Aug 04.

policy, U.S. intelligence gathering and sharing operations have not changed. The PSI places the burden on the U.S. and core participants to do their own collection. There are no known PSI collection activities. Sources at WINPAC explain that although the PSI utilizes a multilateral approach, information sharing is still limited. The United States prefers bilateral information sharing, will not explain its capabilities in a large forum, and must be careful not to share information that would jeopardize another operation.⁷⁸

E. INTELLIGENCE CHALLENGES

Limitations to intelligence utility, and expectations of PSI partners combine to create a rather extensive list of intelligence challenges to PSI's future success. Because of the predominance of the U.S. intelligence community, these challenges are largely tied to U.S. intelligence collection and policies, and can be divided into collecting, sharing, trusting, and exercising.

1. Collecting

The prosecution of the Cold War became the defining factor in the development of most of the practices of today's U.S. intelligence community. The Soviet Union and its allies were largely closed targets, forcing U.S. intelligence to rely on a variety of largely remote technical systems to collect needed information. Because the United States could not get close to its target, it learned how to achieve its intelligence requirements from a distance.⁷⁹

The long-distance nature of U.S. intelligence efforts has resulted in over-reliance on expensive technical collection systems that are deceptively seductive. They produce mountains of raw data with relatively little manpower, but almost never pinpoint the intentions or last-minute strategy shifts provided by human agents. Additionally, experienced and sophisticated foes are developing countermeasures to the collection systems.⁸⁰ When interdicting a shipment in transit, details on the type of cargo, its destination, and the intent of its use are critical to making the decision to intercept. Satellite imagery or other technical intelligence data may not give decision makers

⁷⁸ Interviews with officials at WINPAC.

⁷⁹ Lowenthal, *Intelligence: From Secrets to Policy*, 2nd Ed., 12-13.

⁸⁰ Coffman, "Intelligence and WMD."

enough clarity to warrant a PSI interdiction. Technical means of gathering intelligence are helpful to PSI operations, but not sufficient by themselves to conquer the PSI task at hand.

Human intelligence sources are needed to augment technical capabilities and provide a timely and full assessment that pictures alone cannot give. A recent Congressional report found shortcomings in almost every aspect of the U.S. Intelligence Community's human intelligence collection efforts. Most knowledgeable observers seem to agree that, under the Carter Administration, the United States moved away from recruiting human spies and decided to replace them with satellites.⁸¹ George Tenet recognizes the impact of the lack of human intelligence in Iraq but disagrees with the Congressional report's categorization of the deficiency.

To be sure, we had difficulty penetrating the Iraqi regime with human sources. And I want to be very clear about something: A blanket indictment of our human intelligence around the world is dead wrong. We have spent the last seven years rebuilding our clandestine service. As director of central intelligence, this has been my highest priority.⁸²

While it may have been Tenet's highest priority, the lack of direct access of U.S. intelligence officials to some sources created misinformation that drove decisions at the highest level. Future misguided PSI interdictions due to poor or non-existent human intelligence would likely create doubts internationally, similar to that produced by the 2003 Iraqi War.

2. Sharing

The United States has spent many years debating and worrying about the clashes between democracy and secret intelligence. While the boundaries of the issue continue to be explored, the United States has yet to fully open its doors to the international community.⁸³ In the wake of revelations of CIA spying on U.S. citizens, the U.S. intelligence community lost some of its ability to operate in the black. In addition,

⁸¹ Taylor Dinerman, "Intelligence Failure: Spies and Satellites," *The Space Review* (9 February 2004), <http://www.thespacereview.com/article/96/1>, last accessed Sep 04.

⁸² "Transcript of Tenet Address on WMD Intelligence," *CNN.com* (5 February 2004), <http://www.cnn.com/2004/US/02/05/tenet.transcript.ap/> (Last accessed 1 Sept. 2004).

⁸³ Lowenthal, *Intelligence: From Secrets to Policy*, 2nd Ed., 17.

Senate and House permanent intelligence oversight committees were created, providing scrutiny to the U.S. intelligence process. Despite this scrutiny, exemplified in the Iraqi investigation, the secretive nature of U.S. intelligence remains a challenge to PSI operations.

The biggest impediment to PSI information sharing is the human or systematic resistance to sharing information. When including customs and immigration information, the U.S. intelligence storehouse is immense. But the system for processing and using the information is weak. Often, the information is distributed in compartmentalized channels, or is available but cannot be shared. For example, information that would have helped identify Nawaf al Hazmi, part of the World Trade Center attack, was available but not released because nobody asked for it.⁸⁴

What the story of Hazmi and most stories of intelligence sharing have in common is a system that requires a demonstrated “need to know” before sharing. This system assumes the risk of inadvertent disclosure outweighs the benefits of wider sharing, and also assumes that it is possible to know in advance who needs the information.⁸⁵ In his testimony before a bipartisan commission investigating the 11 September 2001, U.S. Defense Secretary Donald Rumsfeld said, “countries were cooperating and sharing intelligence, but rules designed to protect sources and methods were making it difficult to work together.”⁸⁶

One such restriction that affects intelligence sharing within the PSI is known as the “third-country rule,” which forbids the country receiving a tip from passing it along to anyone else.⁸⁷ Although this rule is consistent with established PSI information guidelines it is only observed by countries possessing large intelligence services. The United States, France, Britain, and Russia observe the rule. When they share intelligence,

⁸⁴ “Final Report of the National Commission on Terrorists Attacks upon the United States,” 416-417.

⁸⁵ Ibid., 417.

⁸⁶ Dafna Linzer, “Worldwide Terror War Hindered by Secrecy,” *SignOnSanDiego.com* (28 March 2004), <http://216.239.57.104/search?q=cache:jtDvdufFqA8J:www.signonsandiego.com/uniontrib/20040328/+worldwide+terror+war+hindered+by+secrecy&hl=en&start=1>, last accessed Jul 04.

⁸⁷ Ibid.

it is done on a bilateral basis and tips are often watered-down to protect sources. According to Vince Cannistraro, a former CIA counterterrorism chief, “The originator of the intelligence controls the dissemination of the intelligence.”⁸⁸ This is not only the rule, but is also problem for countries with limited intelligence gathering capabilities.

It is in these non-westernized countries that WMD trafficking is most likely to occur, and terrorist networks are most likely to strike. Countries with large intelligence services such as Britain and the United States have repeatedly vowed to share intelligence, but with one caveat. British Foreign Secretary Jack Straw said his country “will continue to share intelligence on a bilateral basis.”⁸⁹ Bilateral intelligence sharing will not cover PSI interdictions in many cases. The fifteen core PSI members do not share common bilateral agreements. There will be times when interdictions are requested or required, and one or more participants in the interdiction are not party to the background intelligence. In addition, necessary background information locked in U.S. and European databases could provide necessary tips to PSI participants, but will remain undisclosed due to the third-country rule. Asking states to act, at times with force, without disclosing sources and details, requires a great deal of trust in the reliability of the intelligence. In light of recent events, it is questionable that PSI participants would be willing to act on U.S. and British intelligence alone without details and confirmation.

3. Trusting

In light of intelligence failures in Iraq, U.S. and British intelligence experts continue to promote the utility of intelligence. Lord Charles Powell, the former British Secretary for Foreign Affairs accepts that Iraq was a "hard target" and said that in his experience: “intelligence had provided excellent material in conflicts such as the Falklands war and during the Cold War.”⁹⁰ For example, Soviet defector Oleg Gordievsky gave the West "monumentally important" information about the Soviet

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ Paul Reynolds “Can We Trust the Intelligence Services?,” *BBC News* (24 April 2003), http://news.bbc.co.uk/2/hi/middle_east/2971907.stm, last accessed Aug 04.

leadership and personally briefed Mrs. Thatcher and President Reagan in advance of meetings.⁹¹

Despite historical intelligence successes, failures concerning Iraqi WMD have issued U.S. and British intelligence services a credibility problem. Before the war the CIA was as sure as intelligence professionals can be that Saddam Hussein possessed weapons of mass destruction and was prepared to use them. That sentiment was shared by the intelligence services of Britain, France and other nations. It dated back to the 1990s, long before George W. Bush Administration came to Washington. If the CIA and other intelligence resources did not get right what they were sure they knew, how can they be trusted again?⁹² The weaknesses revealed in larger intelligence services reflect badly on the trust afforded to future assessments.

Can U.S. and British assessment of a North Korean nuclear program, an Iranian nuclear program, or a Syrian chemical weapons program be believed now? The history of intelligence is littered with false information, such as Iraq as well as with triumphs such as the Cold War. The difficulty for PSI participants will be in telling which is which.⁹³ With most intelligence coming from the United States or Britain, PSI participants will be required to make decisions regarding the reliability of the intelligence, many times without the luxury of details due to third-country rules discussed above. Interdiction activities based on U.S. or British promises, without extensive sharing of intelligence, may require a level of trust no longer attached to Western intelligence capabilities.

4. Exercising

One mechanism to build needed trust amongst PSI members was supposed to be joint interdiction exercises. Yet, these exercises are plagued with all-too-familiar intelligence restrictions. The U.S. intelligence community has begun practicing intelligence sharing in exercises, with the chiefs of station being the main parties of exchange. Because exercise scenarios tend to become highly classified as more real

⁹¹ Ibid.

⁹² David Ignatius, "The CIA and the WMD," *WashingtonPost.com* (21 October 2003) <http://www.washingtonpost.com/wp-dyn/articles/A56390-2003Oct20.html>, last accessed Aug 04.

⁹³ Ibid.

information is shared, exercise scripts have been watered down to protect intelligence sources. These exercises can only prepare for actual interdictions to the extent that intelligence services are willing to share threat information.

According to U.S. Senator Robert Hill in a September 2003 press conference concerning Japanese participation in PSI exercises:

These exercises can help determine whether it is legal to do it and whether we would be confident that there would be a sufficient sharing of intelligence to ensure that mistakes weren't made. So it is a testing process and some time in the future after these various exercises have taken place a decision will then be made as to whether to bring this capability into operational effect.⁹⁴

PSI members have yet to solve information sharing problems, and exercises have suffered accordingly. The testing process is only as useful as the concepts and capabilities tested. When protecting information or sources outweighs the need to practice with full capabilities, PSI participants may ultimately be caught off-guard when the real thing takes place.

F. OVERCOMING INTELLIGENCE CHALLENGES

The importance of safe-guarding information and controlling its distribution is likely to relegate PSI intelligence sharing to status quo bilateral agreements. Formalizing these agreements and adding new bilateral agreements among PSI participants would help, but would not fully address intelligence challenges. Fully addressing these challenges would necessitate a revolutionary approach to intelligence sharing. The current U.S. intelligence sharing structure is a hub-and-spoke system, where each agency has its own database. Agencies send information into this database and then can retrieve it. A new concept for information sharing is already being widely discussed throughout the U.S. government. This concept, a trusted information network, is a decentralized approach to information sharing. According to the 9 / 11 Commission, under this concept,

⁹⁴ "Press Conference with Senator Robert Hill (30 September 2003)," <http://www.minister.defence.gov.au/2003/011003.doc>, last accessed Aug 04.

Agencies would still have their own databases, but those databases would be searchable across agency lines. In this system, secrets are protected through the design of the network and an “information rights management” approach that controls access to data, not access to the whole network.⁹⁵

The technology needed to adopt such a concept exists, but presidential support and leadership is still needed. Policy and legal issues are harder than the technical ones, and dictate a governing body ready and willing to enforce network restrictions and punish violators.⁹⁶

Adoption of a similar trusted information network for the PSI is worth considering. First, the network would maximize collection capabilities by combining available technical data with human intelligence from PSI collectors across the globe. Second, the network would facilitate a high degree of intelligence sharing among PSI partners, widening sharing from a bilateral to a multilateral basis. Third, the network would inherently build trust in the intelligence shared through it. Finally, this network would be an integral part of PSI exercises and training, thus allowing PSI partners to have a consistent mechanism for sharing intelligence.

A trusted information network would require a governing body responsible for the planning, resources, and enforcement of information sharing guidelines. According to the 9 / 11 Commission, NATO might fill that square. The commission’s report says: “The PSI can be more effective if it uses intelligence and planning resources of the NATO alliance.”⁹⁷ A NATO trusted information network structure would require it to evolve beyond a traditional security alliance to keep pace with the evolving threat environment. During the June 2004 Istanbul summit, NATO leaders took a step in the right direction with an agreement to improve intelligence sharing among members. Per the summit agreement, the Terrorist Threat Intelligence Unit, created after the September 11 attacks, will be the permanent body under which this intelligence sharing takes

⁹⁵ “Final Report of the National Commission on Terrorists Attacks upon the United States,” 418.

⁹⁶ Ibid., 418-419.

⁹⁷ Ibid., 381.

place.⁹⁸ A NATO-administered trusted information network would require the insertion of an additional article into the North Atlantic Charter, formalizing intelligence and law enforcement cooperation as well as institutionalizing cooperation and intelligence-sharing.⁹⁹

To build trust in the network, breaches of established information sharing procedures would need to be dealt with immediately and severely, to include removal from the network for violations. A punitive system for violators would likely be necessary stipulation to U.S. Intelligence Community acceptance. This would necessitate a revolutionary role for NATO. A NATO structure for intelligence sharing would need to address the inclusive nature of its membership. Some PSI partners are not part of NATO. Sharing with these countries, which includes Russia, would most likely require a separate structure, acceptance into the network, or additions to the NATO alliance. A PSI-specific trusted information network could be an extension of the NATO structure or a second generation structure of the NATO network.

G. CONCLUSION

As PSI participants exercise multilateral interdiction of WMD materials, the role of timely and actionable intelligence cannot be discounted. Although intelligence does not represent the truth, it does provide a proximate reality that is invaluable to operations involving WMD. Sharing this intelligence in a multilateral forum is one of the PSI's prescribed advantages. This advantage appears to be confined to news reports and official statements. The United States and other PSI partner have yet to change their intelligence sharing practices in order to conform to PSI information sharing guidelines. A change, in the form of an internationally recognized trusted information network would minimize intelligence challenges that PSI participants are likely to face in the future.

⁹⁸ "Heads of State and Government Strengthen NATO's Anti-terrorism Efforts," *NATO Update* (29 June 2004), <http://www.nato.int/docu/update/2004/06-june/e0629e.htm>, last accessed Sep 04.

⁹⁹ Steven Brooke and Nicholas Howenstein, "A 21st Century NATO," *In the National Interest* (29 July 2004), www.inthenationalinterest.com/Articles/Vol3Issue25BrookePFV.html, last accessed Sep 04.

III. LEGAL CHALLENGES

A. INTRODUCTION

On 10 December 2002, in the Indian Ocean, Spanish forces acting in concert with the United States, seized a North Korean cargo ship bound for Yemen, carrying fifteen SCUD missiles and fifteen conventional warheads.¹⁰⁰ The next day Spanish forces watched in dismay when U.S. officials allowed the ship to sail away due to legal constraints.¹⁰¹ Ten months later a U.S.-led naval operation interdicted a shipment of thousands of uranium-centrifuge parts bound for Libya. Fortunately for American and British officials, there were no legal stipulations this time, and the nuclear weapons-related materials did not reach Libyan soil. The legal interception of the German-owned ship marked a turning point in negotiations with Libya, which two months later announced it would halt its WMD program.¹⁰² After the interdiction, President Bush announced his intention to make the PSI a step towards “new legal agreements authorizing the search of planes and ships carrying cargo.”¹⁰³

Ostensibly the PSI helped clear legal hurdles in the Libyan case that doomed the North Korean interdiction to failure. Upon closer investigation, the legality of the Libyan interdiction was more a factor of the countries involved than any special legal authority

¹⁰⁰ Tony Karon, “SCUD Seizure Raises Tricky Questions,” *Time.Com* (11 December 2002), <http://www.time.com/time/world/article/0,8599,398592,00.html>, last accessed Jul 04. “The Soviet-designed SCUD-B with a range of some 200 miles is a common item in the arsenals of the Middle East. They’re a 1950s-vintage technology no longer in production in Russia, although North Korea and other countries have continued to manufacture and improve the system. SCUD-Bs of the type suspected of being carried on the So San carry no onboard guidance system — like giant, rocket-powered artillery shells, they are simply pointed in the direction of their target and fired at an optimal angle based on their burn rate. As the Gulf War showed, targeting difficulties made the SCUD an ineffective military weapon, although such imperfections would not diminish its appeal to terrorists.”

¹⁰¹ Benjamin Friedman, “The Proliferation Security Initiative: The Legal Challenge,” *Bipartisan Security Group* (4 September 2003), 1.

¹⁰² Amin, “Recent Developments in Libya.”

¹⁰³ “The Proliferation Security Initiative: Naval Interception Bush-Style,” *CDI Center for Defense Information, Arms Control & Disarmament* (25 August 2003), [http://66.102.7.104/search?q=cache:6Y0uAMkbwCoJ:www.lcnp.org/disarmament/MEMO_NK_interdictio n.PDF+%E2%80%9CThe+Proliferation+Security+Initiative:++Naval+Interception+Bush-Style,%E2%80%9D+CDI+Center+for+Defense+Information,+Arms+Control+%26+Disarmament+\(25+Aug ust+2003\).&hl=en&start=1](http://66.102.7.104/search?q=cache:6Y0uAMkbwCoJ:www.lcnp.org/disarmament/MEMO_NK_interdictio n.PDF+%E2%80%9CThe+Proliferation+Security+Initiative:++Naval+Interception+Bush-Style,%E2%80%9D+CDI+Center+for+Defense+Information,+Arms+Control+%26+Disarmament+(25+Aug ust+2003).&hl=en&start=1), last accessed Sep 04.

given the PSI. Having announced that the early stages of the PSI will likely be focused on shipments by sea, PSI participants are currently fielding questions regarding the legal authority to search and seize international vessels on the high seas or territorial waters. This chapter asks the question: What are the legal challenges to future PSI success and how can they be overcome?

This chapter utilizes the North Korean and Libyan examples as stage setters for the importance of legality involving interdiction operations. First, I examine existing laws pertaining to interdiction, with emphasis on interdiction at sea. Next, I consider how the PSI is currently conducting business from a legal standpoint, and the challenges to that conduct. I end the chapter with a summary of prospective approaches to overcome these legal challenges. Because of the number of variables involved: WMD, interdiction, sovereignty, international institutions, self-defense, and current international law, the legality of PSI operations is complex. In this thesis chapter, I conclude that until the PSI falls fully under the auspices of an internationally recognized justification, such as a PSI-specific UN Security Council Resolution (UNSCR), legal constraints will continue to plague the initiative.

B. IMPORTANCE OF LEGAL JUSTIFICATION

The results of the North Korean and Libyan interdictions differed due to the legal justification for seizing the respective cargo. Although both vessels carried cargo that could be utilized for WMD purposes, the North Korean cargo ship was allowed to sail away with its cargo intact.

1. One That Got Away

Under the Law of the Sea (LOS) Convention, discussed below, vessels on the high seas can be stopped by ships of their flag state. Also, if a ship is not flying a flag and does not demonstrate its state of registration, it can be stopped. Because the North Korean ship, *So San*, flew no flag, it was subject to inspection. Nevertheless, the cargo was not illegal under international law. International law does not prohibit free passage

of nuclear weapons and WMD materials unless proven to be heading into the hands of terrorists.¹⁰⁴

At the time of interdiction, North Korea was party to the NPT, but not the Missile Technology Control Group, and had the right to transfer the SCUDs. The recipient of the cargo was a nation-state, Yemen, and intent to distribute the weapons to terrorists could not be proven. North Korea's withdrawal from the NPT became effective on 10 April 2003. Were a North Korean ship carrying nuclear weapons stopped today, current international law again might not give the interdictors sufficient legal justification to act against the North Koreans.¹⁰⁵

2. One that Did Not Get Away

While successful, the PSI interdiction of cargo bound for Libya underscored the limitations of any interdiction initiative. Because the ship carrying the centrifuges was German-owned, and Germany is a PSI participant, Berlin was able to ask the shipping company to take its cargo to an Italian port for voluntary inspection. Had the ship been registered to a non-PSI participant or an uncooperative government, and not passed through the territorial waters of a PSI participant, the opportunity to search and seize the cargo may not have arisen.¹⁰⁶ In addition, unlike North Korea, Libya ratified the NPT in 1975 and was subject to the terms of the treaty, including the agreement not to pursue nuclear components for weapons use.

3. Bottom Line

When comparing the two cases it is apparent that legal justification will continue to play a major role in the success or failure of interdiction activities. Expanded membership in the PSI will be critical to the legal success of the initiative.

C. RELEVANT EXISTING LAW AND EXPECTATIONS

The PSI participants and interdiction principles covered in chapter one are two of the three variables in determining the legality of interdictions on land, at sea, and in the

¹⁰⁴ Friedman, "The Proliferation Security Initiative: The Legal Challenge," 1.

¹⁰⁵ Ibid., 1.

¹⁰⁶ Boese, "Proliferation Security Initiative Advances: But China and Russia Keep Their Distance."

air. The third factor is the existing laws covering those interdictions. Currently there is no blanket authority enabling PSI participants to seize WMD in transit. Thus far, PSI proponents have relied on a number of laws and treaties that do not directly address interdiction of WMD. The United States has also enforced its applicable domestic legal authorities when appropriate.

1. Article 51 of the UN Charter

International laws pertaining to self-defense may also apply to the legality of interdiction operations. Article 51 of the UN Charter states:

Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defense shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.¹⁰⁷

While PSI proponents have argued for the applicability of Article 51 as legal justification for interdiction of WMD, the language of the article is not specific to PSI-like activities. It only allows an action of self-defense when an armed attack occurs, and in an interim period, until the UN Security Council takes necessary measures. This article does not provide inherent support for on-going international interdiction operations outside the bounds of the UN Security Council.¹⁰⁸

2. UN Security Council Presidential Statement of 1992

One form of statement issued by the UN Security Council is a presidential statement. The Security Council has never defined the scope, content, or nature of

¹⁰⁷ “Charter of the United Nations – Chapter 7: Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression,” <http://www.un.org/aboutun/charter/chapter7.htm>, last accessed May 04.

¹⁰⁸ Sue Soo-ha Yang, *Legal Basis for State Interception of Shipments on High Seas: Legality of the Naval Interdiction under the Proliferation Security Initiative*, Master’s Thesis, Brooklyn Law School, Oct 03, 11.

presidential statements, and they should not be interpreted as creating the same legal obligations as resolutions.¹⁰⁹ The 1992 UN Security Council Security Statement states:

The members of the Council underline the need for all Member states to fulfill their obligations in relation to arms control and disarmament; to prevent the proliferation in all its aspects of all weapons of mass destruction; to avoid excessive and destabilizing accumulations and transfer of arms; and to resolve peacefully in accordance with the Charter any problems concerning these matters threatening or disrupting the maintenance of regional or global stability. They emphasize the importance of regional and global arms control agreements, especially the Strategic Arms Reduction Treaty (START) and Treaty on Conventional Armed Forces in Europe (CFE).¹¹⁰

It goes on to state:

The proliferation of all weapons of mass destruction constitutes a threat to international peace and security. The members of the Council commit themselves to working to prevent the spread of technology related to the research for or production of such weapons and to take appropriate action to that end.¹¹¹

Problematic to the applicability of this article to PSI is the lack of specific mention of interdiction or in-transit actions against proliferators. The emphasis placed on the current treaty-based nonproliferation regime and on a multilateral organizational approach to stopping proliferation is not necessarily applicable to the PSI.

3. UNSCR 1540

On 28 April 2004, the UN Security Council adopted Resolution 1540, which affirms that “proliferation of nuclear, chemical, and biological weapons, as well as their means of delivery, constitutes a threat to international peace and security.”¹¹² The resolution goes on to state that the UN is gravely concerned by the threat of illicit trafficking of WMD, and asks nation-states to adopt and enforce effective laws which prohibit any non-state actor from acquiring, transporting, or transferring WMD or their

¹⁰⁹ Yang, *Legal Basis for State Interception of Shipments on High Seas*, 9.

¹¹⁰ Ibid.

¹¹¹ Ibid.

¹¹² “United Nations Security Council Resolution 1540,” 1.

means of delivery. Paragraph 10 of the resolution calls upon all states “in accordance with their national legal authorities and consistent with international law, to take cooperative action to prevent illicit trafficking in nuclear, chemical, or biological weapons, their means of delivery, and related materials.”¹¹³

According to officials within OSD, specific language regarding PSI was originally part of the resolution, but was removed at the urging of China.¹¹⁴ While Resolution 1540 does not specifically justify PSI interdictions, it does acknowledge the need for better legal and regulatory frameworks to prevent illicit trafficking to non-state actors, and in that sense supports the underlying rationale for the PSI.

4. Sea - LOS Convention

The possible obstacle to interdiction activities on the high seas may be the 1982 United Nations (UN) International LOS Convention, which gives ships the rights of freedom of the seas and innocent passage. These rights are essential to global commerce, ensuring that shipments are not cut off.¹¹⁵ According to Devon Chaffee, research and advocacy coordinator for the Nuclear Age Peace Foundation,

The LOS Convention is one of the most comprehensive and well-established bodies of international regulatory norms in existence. It is buttressed by longstanding international norms, and formal legal agreements critical to creating a more secure international environment.¹¹⁶

Nearly a decade after the last time it surfaced in the United States, the LOS Convention is again on the U.S. Senate table moving toward ratification, thanks in large to Senate Foreign Relations Committee Chairman Richard Lugar.¹¹⁷ Lugar recently wrote a letter to all senators stating that the president strongly supports ratification of the LOS Convention, adding:

¹¹³ Ibid., 2-4.

¹¹⁴ Interviews with officials in the U.S. Office of Secretary of Defense.

¹¹⁵ Friedman, “The Proliferation Security Initiative: The Legal Challenge,” 2.

¹¹⁶ Devon Chaffee, “Freedom or Force on the High Seas? Arms Interdiction and International Law,” *Waging Peace.org* (15 August 2003), http://www.wagingpeace.org/articles/2003/08/15_chaffee_freedom-of-force.htm, last accessed Jul 04.

¹¹⁷ Rod Martin, “American Sovereignty, Lost at Sea?,” *GOPUSA* (24 March 2004), http://www.gopusa.com/commentary/guest/2004/rdm_0324.shtml, last accessed Mar 04.

Some misinformed commentators have erroneously asserted that the Convention's rules would prohibit the sort of at-sea interdiction operations that are central to President Bush's Proliferation Security Initiative, which is designed to prevent the proliferation of weapons of mass destruction and missile technology. Nothing could be further from the truth. ... In fact, the Convention strengthens PSI.¹¹⁸

The perceived strengthening of the PSI by ratifying the LOS Convention would include reassurance to other countries that the PSI will align itself with legal authorities, and not operate outside the bounds of customary international law.

Several European allies agreeing with Lugar say the treaty provides an international legal framework for the PSI, and have warned the United States that the PSI could suffer if the United States doesn't ratify the LOS Convention before the end of the year. At least one ally, the Netherlands, has threatened to reduce its support for the initiative if the sea treaty, ratified by more than 140 countries, is not ratified. The United States, the catalyst for the PSI, is the only country participating in the initiative that has not ratified the sea treaty.¹¹⁹ Conservatives in the U.S. Congress contend the treaty, supported in the Pentagon, by industry, and by environmental leaders, will undermine U.S. sovereignty.¹²⁰

Even if ratified, there is nothing in the LOS Convention that explicitly prohibits transit of WMD or gives nation-states the right to interdict such transit. On the contrary, a number of states, including the United States, have actively opposed the development of such prohibitive norms or interpretations of international law that would prohibit the transit of WMD by seas or air, and cite the rights and privileges established in the LOS Convention to affirm their unhindered military use of the oceans.¹²¹

¹¹⁸ Martin Schram, "A Rare Stand on Principle," *Capital Hill Blue* (24 March 2004), http://www.capitolhillblue.com/artman/publish/article_4286.shtml, last accessed Jul 04.

¹¹⁹ Joan Lowy, "Oceans Treaty may Interfere with Weapons Initiative," *Scripts Howard News Service* (27 May 2004), <http://www.knoxstudio.com/shns/story.cfm?pk=TREATYALLIES-05-27-04&cat=AN>, last accessed Jul 04.

¹²⁰ Ibid.

¹²¹ Nigel Chamberlain, "Interdiction Under the Proliferation Security Initiative," *BASIC: Nuclear and WMD* (6 October 2003), http://www.basicint.org/nuclear/UK_Policy/psi20031006.htm, last accessed Jul 04.

a. High Seas

The high seas include all parts of the sea that are not included in the territorial sea or in the internal waters of a state. The freedom of the high seas is an ancient right tied to global commerce, and one that wealthy trading states like the United States and Britain do not want to undermine. A ship on the high seas is subject to the exclusive jurisdiction of the country whose flag it flies. The flag state does have the right to give the United States or its allies the right to stop and search a ship flying its flag. Limitations to the freedom of the high seas include piracy, slave trade, unauthorized broadcasting, and drug trafficking. Again, there is no mention of restrictions to the shipment of missiles or WMD-related materials.¹²²

b. Territorial Waters

States have the jurisdiction to prescribe law within the territory that extends 12 nautical miles from the shoreline, meaning a state can theoretically set the rules for interdiction in this area. Yet, states have recognized the right to free passage in this area for such a long period of time that it became part of the customary international law that was codified in the LOS Convention. Article 19 of the LOS Convention documents this right to free passage as long as the ship passing through is not deemed prejudicial to peace, good order, or security; and then lists the ways in which passage might be denied. Transport of missiles or WMD components is not mentioned in the list, nor can it be asserted that it fits into any of the prohibited activities.¹²³ Article 23 of the LOS Convention explicitly gives the right of free passage to states carrying nuclear weapons. This article was clearly drafted by existing nuclear powers to enable port calls by nuclear-armed naval ships. It is only in the case of shipments that are intended for terrorists, which are distinctly forbidden by the UN Charter, that right of passage laws appear non-binding.¹²⁴

¹²² Friedman, “The Proliferation Security Initiative: The Legal Challenge,” 4.

¹²³ Ibid., 3.

¹²⁴ Ibid.

5. Land – State Territory

Within the territory of a state, complete jurisdiction is allotted to that state to both legislate and enforce. Interdiction operations on the state's land require national laws, and would be enforceable upon any vessel and to any state or foreign national involved in a transaction. Properly constructed, national laws could legitimize PSI-related land interdictions within the boundaries of the acting state's territory.¹²⁵

6. Air Space – Chicago Convention

The Convention on International Civil Aviation, signed in Chicago on 7 December 1944, remains the most completely recognized piece of international law regarding air transit. According to the convention, every nation-state has complete exclusive sovereignty over the airspace above its territory, which is deemed to be the land areas and territorial waters adjacent to and under the protection or mandate of such state.¹²⁶ Under Article 35 of the convention states may deny access to their airspace to aircraft carrying “munitions or implements of war” and may regulate or prohibit carriage of other articles “for reasons of public order and safety.”¹²⁷

Although denial of airspace access under the Chicago Convention is allotted for reasons consistent with thwarting the transit of WMD, there is no explicit mentioning of interdiction. Additionally, denial of air transit in international airspace is not covered by this or any other internationally recognized law or treaty.

7. U.S. Legal Authorities

The United States itself currently has substantial domestic legal authorities to interdict the transfer of WMD, missiles, and related materials. These authorities fall into the categories of imports of items into the United States, exports of items from the United States, transit / transshipment of items in U.S. waters or U.S. airspace, and transport of

¹²⁵ Daniel Joyner, “The PSI and International Law,” *The Monitor* (Spring 2004, Vol. 10, No. 1), 8.

¹²⁶ “Convention on International Civil Aviation, Signed at Chicago, on 7 December 1944 (Chicago Convention),” <http://www.iasl.mcgill.ca/airlaw/public/chicago/chicago1944a.pdf>, last accessed Sep 04, 1.

¹²⁷ *Ibid.*, 13.

items on the high seas / in international airspace. These authorities are exercised consistent with U.S. ratified treaties and customary international law.¹²⁸

a. Import Items into the United States

U.S. customs authorities have the power to inspect, detain, or seize any cargo brought into the United States when there is probable cause that it is being imported contrary to U.S. law. Items that violate U.S. law may include: items prohibited in the United States, items lacking licensing, items with false documentation, or items that can be used to further terrorist or criminal acts. U.S. customs laws are generally broad enough to seize most if not all items that are of proliferation concern.¹²⁹

b. Exports of Items from the United States

U.S. export control authorities have the power to prevent WMD and related material from being U.S. exports. Licensing requirements on export items to most destinations, including licensing of any dual-use item, is the biggest deterrent to exporting proliferation materials from the United States. The United States also holds the rights to stop, inspect, and seize any cargo that could be WMD-related.¹³⁰

c. Transit / Transshipment of Items in U.S. Waters or U.S. Airspace

The issue of inspection or interdiction of items in transit within U.S. waters or airspace is a bit more complex, but generally follows the same rule of law as imports and exports. Under U.S. law, the transit or transshipment of WMD-related materials is considered an import when items enter U.S. territorial seas or airspace, and an export when they leave U.S. territorial seas or airspace. When a foreign-flag vessel traverses the U.S. territorial sea without entering into internal waters or a port facility, the LOS Convention takes precedence. Thus, passage is legal as long as it is not prejudicial to peace or good order and security, as noted above. Consistent with the Chicago Convention, the United States may apply customs and export control laws on an aircraft

¹²⁸ “U.S. Legal Authorities for Interdiction of Weapons of Mass Destruction, Missiles, and Related Cargoes,” obtained during interview with officials at the U.S. State Department, Jul 04.

¹²⁹ Ibid.

¹³⁰ Ibid.

transiting U.S. airspace even if it is not scheduled to land or unload cargo in the United States.¹³¹

d. Transport of Items on the High Seas / in International Airspace

The U.S. government has broad authority to stop, board, search, and seize cargo on the high seas when the vessel is U.S.-flagged and in violation of U.S. law. This statutory authority does not generally pertain to foreign-flagged vessels trafficking on the high seas. Barring explicit permission or hot pursuit from U.S. territory, the U.S. has no standing legal authority to stop and board the vessel. The same principle applies to interdiction of foreign registered aircraft flying in international airspace.¹³²

8. Legal Expectations

Legal expectations must start with avoidance of situations such as the one involving the *So San*. When the decision to interdict a shipment has been made, PSI partners must ensure legal justification exists for stopping, searching, seizing, or destroying the vessel or materials on-board. PSI legal expectations will grow as international support for the initiative grows, and corresponding international laws and resolutions are enacted. As the rest of this chapter explains, PSI partners cannot be expected to legally interdict all WMD shipments until an umbrella justification exists for these interdictions.

D. CURRENT SITUATION

The PSI does not empower participants to do anything they previously could not do, nor does it grant governments any new legal authority to conduct interdictions in international waters or airspace.¹³³ Because PSI members are most familiar with maritime interdiction, current efforts to bolster PSI's legal authority have centered on sea law. Speaking to the Federalist Society in November of 2003, John Bolton, U.S. Undersecretary of State for Arms Control and International Security said this of PSI's legitimacy: "where there are gaps or ambiguities in our authorities, we may consider

¹³¹ Ibid.

¹³² Ibid.

¹³³ "The Proliferation Security Initiative (PSI) At a Glance," *Arms Control Association* (December 2003), <http://www.armscontrol.org/factsheets/PSI.asp>, last accessed Jul 04.

seeking additional sources for such authority, as circumstances dictate.”¹³⁴ To date, the United States and fellow PSI participants have identified authorization to search and seize on the sea in three cases: 1) when ships do not display a nation’s flag, effectively becoming pirate ships; 2) when ships use a “flag of convenience” and the nation chosen gives PSI participants permission; and 3) when there is a serious belief the vessel is carrying WMD, invoking a right to self-defense, or prevention of WMD proliferation.¹³⁵

1. No Flag

It is consider impolite in international shipping circles, to sail on the high seas in ghost or pirate vessels, without a flag, flaunting a false cargo manifest. Given the underhanded mode of transportation, the cargo and vessel could be subject to forfeiture under the doctrine of piracy and prize.¹³⁶ According to John Bolton, “vessels on the high seas may, under well-accepted principles of customary international usage, be boarded by any navy if they do not fly colors or show proper identification.”¹³⁷ The lack of an identify flag is justification enough for PSI interdictions to board suspect vessels.

2. Governmental Permission

As noted above, rationale for search and seizure under the LOS Convention includes permission from the government whose flag the ship is flying. Working within the confines of the LOS Convention, PSI participants are orchestrating deals with supporting countries and other participants to allow such legal search and seizure. For example, the United States signed a boarding agreement with Liberia on 11 February 2004 that allows vessels suspected of transporting dangerous arms to be stopped and searched by the other’s military and law enforcement agencies. This agreement includes boarding on a case-by-case basis, but if a specific request is not responded to within a two-hour period, it will be treated as consent to act. The value of this agreement is

¹³⁴ “Bolton Confident Proliferation Security Initiative Is Legitimate,” U.S. State Department (13 November 2003), <http://usinfo.state.gov/topical/pol/terror/texts/03111300.htm>, last accessed Jul 04.

¹³⁵ Greg Sheridan, “US ‘free’ to tackle N Korea,” *The Australian* (9 July 2003).

¹³⁶ Ruth Wedgwood, “A Pirate is a Pirate,” *Wall Street Journal* (16 December 2002).

¹³⁷ “Bolton Confident Proliferation Security Initiative Is Legitimate.”

underscored by the fact that approximately 1,500 oceangoing ships are registered to Liberia, second only to Panama's 5,000.¹³⁸

On 12 May 2004, the United States and Panama signed a reciprocal maritime ship boarding agreement that facilitates cooperation between the United States and Panama to prevent shipments by sea of WMD and their delivery systems or related materials by establishing procedures to board and search vessels in international waters suspected of carrying such items.¹³⁹ Given that together, Panama and Liberia account for roughly thirty percent of the world's commercial shipping tonnage, the ship boarding agreements will ease some of PSI's legal concerns on the high seas.¹⁴⁰ The U.S. Department of State spokesman continues to pursue as much as ten additional states about concluding similar boarding arrangements.¹⁴¹

3. Right to Self-Defense / Stop Proliferation

The United States and fellow PSI participants have invoked Article 51 of the UN Charter as a legal basis for interdiction activities. For example, if the United States knew that a North Korean ship was carrying WMD-related materials outside the country, it would simply stop it, justifying the action as self-defense, given North Korea's history of exporting to rouge states and non-state actors.¹⁴² This claim is controversial and not fully accepted as a legal basis for interdiction, a situation discussed in the next section.

In addition, the U.S. State Department believes that the PSI is consistent with, and a step in the implementation of, the UN Security Council Presidential Statement of 1992. State Department officials have added that the PSI supports the need for more coherent and concerted efforts to prevent the proliferation of WMD, delivery systems, and related

¹³⁸ Boese, "Proliferation Security Initiative Advances: But China and Russia Keep Their Distance."

¹³⁹ "Proliferation Security Initiative Ship Boarding Agreement with Panama," U.S. State Department (12 May 2004), <http://www.state.gov/t/np/trty/32858.htm>, last accessed Jul 04.

¹⁴⁰ "Statement by President: Panama's Signing of Ship Boarding Agreement," *White House Press Release, Office of the Press Secretary* (12 May 2004), <http://www.state.gov/t/np/rls/prsrl/32420.htm>, last accessed Jul 04.

¹⁴¹ Ibid.

¹⁴² Michael Levi and Michael O'Hanlon, "International Response: British Diplomats Dispute U.S. Authority to Intercept Suspect Shipments," *Financial Times* (11 July 2003).

materials.¹⁴³ The applicability of the 1992 statement to the PSI is one of many legal challenges currently facing the initiative.

E. LEGAL CHALLENGES

While PSI participants have conducted thorough reviews and repeatedly stress that PSI interdiction efforts are grounded in existing domestic and international authorities, the verification of legal grounding remains a challenge.¹⁴⁴ International authority vested in the LOS Convention and UN documentation does not fully support PSI activities, and domestic authorization can only be applied on a case-by-case basis.

1. Interdiction Principles Not Covered by LOS Convention

PSI interdiction principles include taking action on cargoes of WMD and related materials consistent with international laws. The trouble with this principle is that international laws do not specifically cover interdiction of WMD on the high seas or in territorial waters. Justification for naval interception on the high seas is difficult to acquire because all states enjoy freedom of the high seas in accordance with the LOS Convention. Limitations to the freedom of the high seas do not include restrictions to the shipment of missiles or WMD-related materials. Noting this fact at the second PSI meeting, the Australian Foreign Minister said, “it was more likely that the short-term efforts would be confined to PSI member states’ territorial waters.”¹⁴⁵

Efforts to justify PSI activities in territorial waters also lack significant support from the LOS Convention. Article 19 (which lists free passage restrictions) of the LOS Convention does not restrict free passage of WMD-related materials in territorial waters. Additionally, Article 23 explicitly mentions the right of innocent passage to states carrying nuclear weapons. It would be difficult for PSI participants to inspect suspect shipments in territorial waters as long as the intention of the passage is innocent. Thus, unless suspect shipments are clearly determined to be intended for terrorists, the right of passage provisions in the LOS Convention gives opponents of the PSI powerful legal ammunition.

¹⁴³ “Proliferation Security Initiative: Chairman’s Conclusions at the Fourth Meeting.”

¹⁴⁴ “Bolton Confident Proliferation Security Initiative Is Legitimate.”

¹⁴⁵ “The Proliferation Security Initiative: Naval Interception Bush-Style.”

2. Applicability of UN Documents

U.S. assertions of PSI interdiction justification through Article 51 of the UN Charter, UNSCR 1540, and the UN Security Council Presidential Statement of 1992 remain sketchy at best. The language of Article 51 only allows an action of self-defense when an armed attack occurs, and in an interim period until the UN Security Council takes necessary measures. This article does not provide inherent support for on-going international interdiction operations outside the bounds of the UN Security Council. The fact that the PSI has yet to define the standard of proof necessary for interdiction activities, coupled with the current climate of distrust toward American intelligence, makes the self-defense argument harder to use as legal justification.¹⁴⁶

UNSCR 1540 does acknowledge the need for better legal and regulatory frameworks to prevent illicit trafficking to non-state actors, and hints at cooperative actions to stop proliferators, but does not provide a legal basis for interdictions by PSI partners. Specific language regarding interdictions and use of force against WMD traffickers must accompany any resolution for it to meet the purpose of PSI operations. Its applicability is limited by the removal of PSI-specific interdiction language by Chinese officials.

Even if a presidential statement represented a formal legal effect not yet stipulated by the Security Council, the question remains as to its applicability toward interdiction on the high seas. The argument is not convincing that the 1992 statement changes any international law on freedom of navigation or empowers interdiction of WMD shipments under the PSI. Minus an authorization from the UN Security Council, confirming the applicability of the 1992 statement to the PSI, it cannot be considered germane to interdiction activities under the PSI umbrella.¹⁴⁷

¹⁴⁶ Yang, *Legal Basis for State Interception of Shipments on High Seas*, 9.

¹⁴⁷ Ibid., 11.

F. OVERCOMING LEGAL CHALLENGES

1. Overcoming the LOS Convention Challenge

Because the LOS Convention does not explicitly prohibit the transit of WMD, PSI interdictions are not legally covered. To overcome this challenge, PSI partners can either operate outside the bounds of the convention, or seek to add specific WMD interdiction language to the convention. The prospects of each of these approaches are discussed below.

a. Operating Outside the LOS Convention (Positive Outlook)

The likelihood that the United States and other PSI participants would continue to develop an interdiction strategy outside of international law is reinforced by the current U.S. trend towards dismantling norms that discourage the U.S. exercise of military power. U.S. withdrawal from the Anti-Ballistic Missile Treaty, abandonment of START II, failure to ratify the Comprehensive Test Ban Treaty, and stalled efforts to improve the Biological Weapons Convention indicate a movement away from multilateral nonproliferation solutions.¹⁴⁸ By developing PSI norms outside international law, the hope would be that the practice would become customary international law over time. Ruth Wedgwood, an international scholar close to the members of the Bush Administration, used this analogy in an April 2003 *Wall Street Journal* article:

The United States should interdict North Korean ships based on the same rationale that Britain used to intercept slave ships. Britain needed no justification beyond a moral one.¹⁴⁹

Customary international law can change as states begin to feel compelled to avoid certain actions. Continued interdiction of WMD materials, designed to keep these materials out of the hands of those likely to use the WMD, might be enough to compel a change of customary law.

b. Operating Outside the LOS Convention (Negative Outlook)

If PSI participants attempt to exchange LOS Convention norms for selective nonproliferation activities, they could eventually restrict their own country's

¹⁴⁸ Chaffee, "Freedom or Force on the High Seas?"

¹⁴⁹ Friedman, "The Proliferation Security Initiative: The Legal Challenge," 5.

access to international waters.¹⁵⁰ Erosion of the LOS Convention laws to suit the PSI is not likely to happen quickly enough to serve the PSI's purposes. Furthermore, even if a norm against trafficking WMD becomes internationally recognized, it is another matter to assert a right to interdict based on that norm.¹⁵¹

c. Changing the LOS or Creating a New Treaty (Positive Outlook)

PSI participants could put forward a new treaty or protocol to the LOS Convention itself. Doing so could alter the right innocent passage verbiage to include all cargos suspected to contain materials related to WMD. This would give PSI participants internationally recognized justification for interdiction activities.

d. Changing LOS or Creating a New Treaty (Negative Outlook)

This approach faces three problems, the first being time. The LOS Convention took decades to write. Changing it would likely take years, which is too long for the PSI's purposes. Second, even if the treaty were broadly signed and ratified, countries such as North Korea would not become party to the treaty. Third, altering a treaty cannot itself authorize interdiction of weapons shipments. While pushing a PSI resolution at NPT and CWC review conferences that would declare shipments inconsistent with the treaties might be another avenue PSI partners should pursue. These still wouldn't apply to non-parties, and might be vetoed by other signatories. Justification for interdiction would likely take a UN Security Council resolution.¹⁵²

2. Overcoming the UN Applicability Challenge

While UNSCR 1540 acknowledges the need for better legal and regulatory frameworks to prevent illicit trafficking to non-state actors, it does specifically add legal justification for PSI interdictions. A UN Security Council Resolution authorizing these interdictions would provide blanket legal authority for the PSI. Positive and negative outlooks of this occurrence are described below.

¹⁵⁰ Chaffee, "Freedom or Force on the High Seas?" "

¹⁵¹ Friedman, "The Proliferation Security Initiative: The Legal Challenge," 5.

¹⁵² Ibid., 7.

a. PSI UN Security Council Resolution (Positive Outlook)

The most effective means to justify PSI activities would be a UN Security Council resolution authorizing interdiction. A Security Council resolution would trump existing treaty limitations and give PSI participants the legal justification they need.¹⁵³ U.S. diplomats understand the power of a resolution and are currently pressing the Security Council to endorse a draft resolution that would allow the “use of force against entities and individuals suspected of trying to develop, possess or transfer WMD.”¹⁵⁴ Washington officials are seeking Security Council approval under chapter 7 of the UN Charter, which binds states to implement Council decisions.¹⁵⁵ Even Security Council resolution aimed specifically at interdicting North Korean shipments might give PSI participants much of the justification they need to interdict. According to Don Rothwell, an international law expert at the University of Sydney:

The easiest way for the PSI nations to get around international law is for the Security Council to make a resolution aimed at North Korea. Such an interdiction resolution was in place for 12 years against Iraq after the 1991 Gulf War.¹⁵⁶

On 13 November 2003, John Bolton affirmed he and other PSI participants doubted that only the Security Council could grant the authority PSI needs.¹⁵⁷ Yet, it appears today that the Security Council remains PSI’s best bet for internationally recognized interdiction justification.

b. PSI UN Security Council Resolution (Negative Outlook)

John Burroughs, executive director of the Lawyers Committee for Nuclear Policy, a U.S.-based non-profit disarmament advocacy group argues that there is nothing in the UN Charter that gives the Security Council the authority to adopt global legislation for WMD interdiction. In addition, many Security Council members fear a resolution

¹⁵³ Ibid., 4.

¹⁵⁴ Haider Rizvi, “US Pushes UN to Endorse Preemptive Action Against Suspected WMDs,” *Anti War.com* (27 February 2004), <http://www.antiwar.com/ips/rizvi.php?articleid=2056>, last accessed Mar 04.

¹⁵⁵ Ibid.

¹⁵⁶ “Slow Start for Interdiction Regime,” *Radio Netherlands* (10 July 2003), <http://www.rnw.nl.hotspots/html/psi030710.html>, last accessed Mar 04.

¹⁵⁷ “Bolton Confident Proliferation Security Initiative Is Legitimate.”

would give Washington a free hand to unilaterally deal with the as yet undefined entities and individuals. Past negotiations have stalled because of two of five permanent Council members, China and Russia. With Russia now a core PSI member, China continues to stall the progress of a PSI resolution, as evidenced by their removal of specific PSI language from UNSCR 1540.

G. CONCLUSION

Given the difficulties of operations outside the LOS Convention, the time needed to change or create a new treaty, and the suspect legitimacy of new customary laws, the best chance for the across-the-board PSI legal legitimacy is by adopting specific PSI provisions within the existing treaty-based nonproliferation regime. A PSI-specific UN Security Resolution would be the most effective legal umbrella. A key to passing such an initiative would be Chinese support of PSI interdiction principles. Chinese, along with the now promised Russian support of PSI interdiction principles, would allow the initiative to balance its individual strengths with internationally recognized justification through the UN Security Council. Without support from China and Russia on the council, a WMD interdiction resolution will never be passed. The lack of a PSI-specific Security Council resolution will rest the initiative's legal hopes on individual deals and non-binding documents that do not explicitly address interdiction activities. If PSI's legal argument does not become stronger, participants in the initiative will once again find occasion to watch known proliferators sail into the sunset because of a legal technicality.

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IV. OPERATIONAL CHALLENGES

A. INTRODUCTION

Interdiction operations are not a new response to the proliferation challenge. These operations have taken place many times before, but they were focused on items before they leave cargo holds in airports, seaports, or warehouses. Proliferators are now increasingly using sophisticated and aggressive techniques to circumvent export controls, and are employing brokers or middlemen to receive and re-export items to their final destination.¹⁵⁸ These new techniques require a strengthening of national export control systems and widening the spectrum of WMD interdiction to include in-transit intercepts. By focusing on this in-transit phase, the PSI provides a second line of defense to export control systems.

The previous chapters of this thesis examine the intelligence and legal challenges to successful interdictions. Once actionable intelligence is received and legal hurdles are cleared, the work of PSI participants is only beginning. The operational aspect of the PSI is not without its own challenges. This thesis chapter examines the operational challenges to future PSI success and considers how they can be overcome. I first consider the guidelines for PSI interdiction operations, progress made in adhering to these guidelines, and expectations for future PSI operations. Second, I address the operational capabilities of PSI partners, and the results and effectiveness of joint PSI exercises. These exercises address some of the challenges to PSI operations. In the third section of this chapter I review these challenges, which include: interoperability, WMD detection, and use of force during air-intercepts. In the final section of this chapter, I prescribe a team approach to PSI interoperability, improvements in detection technology and industry partnerships, and a second look at the feasibility of using force to interdict aircraft.

¹⁵⁸ “The Proliferation Security Initiative,” U.S. State Department (11 May 2004), <http://www.state.gov/t/np/rls/rm/32899.htm>, last accessed Aug 04.

B. GUIDELINES AND EXPECTATIONS

Most PSI intercepts will closely resemble the law enforcement model utilized in stopping in-transit drug smuggling. This model emphasizes coalition building and community action to intercept illegal drugs. The PSI is following the same type of model, first building international support for the initiative, then relying on the joint abilities of the nonproliferation community to take action on illegal shipments of nuclear, chemical, or biological weapons and materials. The ability to take action is the cornerstone of future expectations for PSI operations. As noted in chapter one, effective action does not always include military involvement.

According to the *U.S. Doctrine for Joint Interdiction Operations*, “Interdiction is an action to divert, disrupt, delay, or destroy the enemy’s surface military potential before it can be used effectively against friendly forces.”¹⁵⁹ The PSI, a multi-national effort designed to cut off or prohibit land, sea, and air trafficking of WMD, operates under the auspices of this definition. First, the PSI uses the strength of multilateral partnerships to make trafficking of WMD a politically risky venture. Second, the PSI disrupts supply lines and channels target movements into easier to manage areas. Finally, the PSI combines capabilities of several members to stop vessels and conduct search, seizure, or other military operations. The law enforcement model, PSI interdiction principles, progress thus far, and future expectations are discussed below.

1. Law Enforcement Model

The Drug Enforcement Administration (DEA) mission is to eliminate the supply of drugs in America through law enforcement. The DEA works together with target communities that are willing and able to commit to long-term solutions to immediate drug-trafficking problems. With DEA leadership, other federal agencies are called to the table in an effort to broaden the resources available to the community.¹⁶⁰ While each

¹⁵⁹ “Doctrine for Joint Interdiction Operations,” *Joint Pub 3-03* (10 April 1997), http://www.dtic.mil/doctrine/jel/new_pubs/jp3_03.pdf, last accessed Sep 04, I-1.

¹⁶⁰ “Integrated Drug Enforcement Assistance,” <http://www.usdoj.gov/dea/programs/idea.htm##>, last accessed Aug 04.

community is unique, there are several common elements, including identification procedures and execution of enforcement operations (see figure 4).¹⁶¹

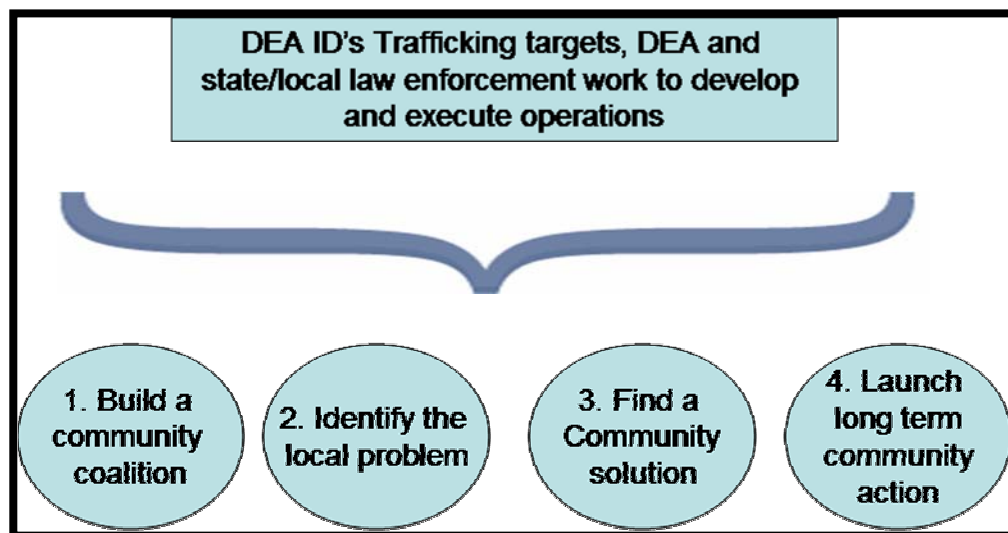


Figure 4. How the IDEA Works, from WWW.DEA.GOV¹⁶²

The PSI plan of attack closely resembles that of the DEA. First, PSI participants built coalition support for the initiative through acceptance of a norm against the proliferation of nuclear, chemical, and biological weapons and materials. Next, participants formally identified the problem in a ratified UN Security Council Resolution. Now PSI members are refining the solution through exercises and training, and launching multilateral interdiction activities designed to bring long term solutions to the WMD trafficking problem. The international community approach for PSI is tied to the acceptance by over sixty countries of the initiative's interdiction principles, established in September 2003.

2. PSI Interdiction Principles and Progress

PSI interdiction principles call upon participants to: "take specific actions to support interdiction of cargoes of WMD, delivery systems, and related materials consistent with national and international laws, including not transporting such cargoes, boarding and searching vessels flying flags that are reasonably suspected of carrying such

¹⁶¹ Ibid.

¹⁶² Ibid.

cargoes, allowing authorities from other states to stop and search vessels in international waters, interdicting aircraft transiting sovereign airspace that are suspected of carrying prohibited cargoes, and inspecting all types of transportation vehicles using ports, airfields, or other facilities for the transshipment of prohibited cargoes.”¹⁶³ Breaking this principle down, the PSI asks its participants to support interdiction of WMD, stop and search suspect vessels, and perform military action if needed.

a. International Support

PSI core members, with strong support from the George W. Bush Administration, pushed a resolution through the United Nations in April of 2004 that endorsed important principles of the PSI. UN Security Council Resolution 1540 affirms that proliferation of WMD constitutes a threat to international peace and security, and asks nation-states to adopt and enforce effective laws, and take cooperative action to prohibit any non-state actor from acquiring, transporting, or transferring WMD or their means of delivery.¹⁶⁴ Through this and other multilateral agreements to stop WMD shipments, the PSI is beginning to foster a multinational norm.

Over sixty countries now support PSI interdiction principles. This international support triggers deterrence by denial. The threat that a shipment will be stopped and potentially seized should act as a deterrent to potential WMD suppliers and recipients. For suppliers, seizure could lead to embarrassing exposure with the possibility of political, economic, or military sanctions by PSI member states. For recipients, interdiction risks exposing what in most cases are covert programs to build a secret WMD capability. This exposure could trigger responses from a variety international organizations and state actors, to include inspections, sanctions, or military action.¹⁶⁵

b. Right This Way Please

Interdiction can be an effective means of channeling a proliferator’s movement, forcing the enemy to maneuver through or along predictable avenues. The

¹⁶³ Spring, “Harnessing the Power of Nations for Arms Control: The Proliferation Security Initiative and Coalitions of the Willing,” 2-3.

¹⁶⁴ Ibid., 2-4.

¹⁶⁵ Winner, “The PSI as a Strategy,” 10.

PSI uses its international support mechanisms to funnel illegal transit into more predictable routes. The United States signed boarding agreements with Liberia and Panama in early 2004 that allow vessels suspected of transporting dangerous arms to be stopped and searched by the other's military and law enforcement agencies. Given that together, Panama and Liberia account for roughly thirty percent of the world's commercial shipping tonnage, the ship boarding agreements deter would-be proliferators from using these vessels or routes of transit.¹⁶⁶ Because proliferators are now aware that justification for interdiction activities exists aboard these vessels, they are less likely to use them. This leaves the intelligence community with a smaller area in which to collect, and the operational community with a smaller area to search. With more PSI agreements unfolding each month, proliferators will find it harder to find routes of safe passage, and PSI participants will find it easier to predict which routes and means of transit the proliferators will use.

c. Stop, Search and Seize

When proliferators are stopped and searched, the combined capabilities of multinational PSI partners make intercepts of WMD more likely. An important, publicly announced intercept in October 2003 involved the *BBC China*, a German-owned ship, tracked from Dubai, and bound for Libya. Five containers, each forty feet in length, listed on the ship's manifest as full of used machine parts, were found to contain sophisticated centrifuges used in the development of nuclear weapons. While this incident displays the promise of the PSI, what happened next epitomizes the difficulty of WMD interceptions.

While accounts of what happened on-board the *BBC China* are still cloudy, the American-led team that seized the five containers of centrifuge parts apparently missed one other container. This container came from a place other than the Malaysian factory of the others. It was full of components for the P-2, the most advanced centrifuge available, and arrived in Libya unopened five months after the intercept of the

¹⁶⁶ "Statement by President: Panama's Signing of Ship Boarding Agreement."

ship. The George W. Bush Administration said the interdiction team reported that it would have been impossible to open all of the containers.¹⁶⁷

d. Military Action

The PSI has yet to officially use force to stop would-be proliferators. While detecting WMD in a static on-board situation proves hard enough, the decision to use military force to stop or destroy an aircraft, ship, or land vehicle suspected of harboring WMD or related materials would be even more difficult and politically unsettling. What happens if an aircraft refuses to comply with an order to land or not enter a PSI participant's airspace? How will air interdiction be conducted against aircraft on the ground? The fact that PSI participants can only search for in-transit WMD when on-board the vessel makes it advantageous for the proliferating actor to dismiss requests to stop and search his vessel. The PSI has yet to address the likelihood of using force and the means to assess the proportionality of the force needed to intercept aircraft suspected of carrying WMD.

3. Operational Expectations

The PSI set a high bar with the publication of its interdiction principles. The expectation of PSI participants and supporters includes a community approach to WMD trafficking, not unlike the DEA. Unfortunately for the PSI, dogs don't sniff out WMD; and nuclear, chemical, and biological weapons are indiscriminate killers. The ability to cover land, sea, and air routes, and stop, search, and seize all conceivable WMD material is today an unrealistic expectation. A more realistic operational expectation is the ability to cooperatively and successfully act upon highly reliable intelligence and legal jurisdiction. Once the decision to interdict is made, the vessel must be stopped, and the suspect material must be seized. PSI participants will likely be fully engaged on a daily basis to meet this expectation, training and exercising to ensure the operational phase of the PSI is not its weakest link.

¹⁶⁷ William Broad and David Sanger, "Libya Receives a Surprise," *New York Times* (24 May 2004), http://www.nucleardisarmament.org/NuclearDisarmament/news.cfm?article_id=402&view=full, last accessed Aug 04.

C. CURRENT SITUATION

Rather than review the interdiction of the *BBC China* as an operational effectiveness barometer, a look at U.S. and PSI partner interdiction capabilities and the exercise regiment of the initiative more accurately identifies the focus, strengths, and weaknesses of PSI operations. The United States provides much of the interdiction capability, but PSI partners add some high-technology assets and expand operational reach. Joint PSI exercises began in September 2003 and are currently scheduled to continue through at least 2006. They were initially scheduled as public relations tools to portray the operational image of the PSI. Exercises have included ground, maritime, air-interception, and international airport training scenarios. PSI participants learn lessons from each exercise, some shared and some not. The exercises continue to focus on the interoperability of interdicting agencies and detailed search and detection operations, but mostly in a static environment. Missing is the practice of the question many PSI supporters don't want to answer: what if force is necessary? A synopsis of PSI partner interdiction capabilities and exercise focus and lessons learned follows.

1. Interdiction Capabilities

The United States is the most capable PSI participant for performing interdictions. Land, sea, and air forces possess a variety a weapons and associated platforms to interdict enemy operations. Table 3 summarizes U.S. interdiction capabilities.

| |
|---|
| Land-and sea-based air forces employ missiles, bombs, precision-guided munitions, cluster munitions, land or sea mines, electronic warfare systems, and sensors from airborne platforms |
| Naval forces employ missiles, munitions, torpedoes, and mines |
| Land forces employ attack helicopters, missiles, artillery, and those forces capable of conducting conventional airborne, air assault, and amphibious operations |
| Special operations forces may support conventional interdiction operations by providing terminal guidance for precision-guided munitions, or may act independently when the use of conventional forces is in appropriate or infeasible |

Table 3. U.S. Joint Interdiction Capabilities, *from Joint Pub 3-03*¹⁶⁸

¹⁶⁸ "Doctrine for Joint Interdiction Operations," V-1.

Other coalition partners add significant capabilities to potential PSI interdiction operations. First, they add third and fourth generation aircraft capable of interdicting any commercial aircraft in flight. Second, they add naval fire assistance to a U.S. fleet that is stretched too thin at times. Finally, they provide a geographical presence for the PSI interdiction forces. Participating PSI countries are located sporadically across the globe on every continent but Antarctica. This global disposition provides the needed reach for PSI interdiction operations.

The scope of these coalition interdiction capabilities was exemplified in the first U.S. / Iraqi Gulf War. During the war, more than 165 ships from 19 coalition navies challenged more than 7,500 merchant vessels, boarded 964 ships to inspect manifolds and cargo holds, and diverted 51 ships carrying more than 1 million tons of cargo in violation of UN Security Council sanctions. These interdiction activities completely suspended all high-volume imports to Iraq.¹⁶⁹

The potential firepower of PSI partners to interdict suspected WMD trafficking exists. Projecting this power will necessitate a high level of coordination between PSI participants. Troublesome is the fact that there are currently no permanent command and control (C²) networks established to govern interdiction operations under the PSI. While the United States has taken on a political spokesman role, it has no permanent operational command authority over PSI forces. Even within the United States, PSI C² is ill-defined. Special Operations Command was first designated the executive agent for all matters related to the PSI for the U.S. DoD. This designation lacked support and subsequent initiatives are being sought. Without a formal C² structure, PSI participants are taking turns as lead agencies for joint ground, sea, and air exercises.

2. Ground / Customs Exercises

To date, one ground exercise and one customs exercise have been conducted in conjunction with PSI interdiction principles. From 19-21 April 2004, Poland led exercise *SAFE BORDERS* in Wroclaw, Poland. The exercise focused on customs and border

¹⁶⁹ Ibid., V-5.

control procedures connected with movements of dangerous chemicals and other substances used for mass destruction arms. PSI core member participants included Poland, Germany and the United States. Bulgaria, the Czech Republic, Lithuania, Romania and Hungary also participated, while Australia, Italy, Japan, Netherlands, Portugal and Spain observed.¹⁷⁰

Exercise *HAWKEYE*, a German-led 31 March – 1 April 2004 exercise at the Frankfurt main airport, trained civil defense personnel on the prevention of the transport of nuclear-related materials by means of air travel. Main focal points of the exercise included a coordinated approach of competent airport authorities which allowed them to shape their collaboration during the exercise in a very realistic fashion and as authentically as possible. PSI core participants included Germany, Singapore, Australia, and the United States. The exercise was observed and evaluated by international experts from twenty-nine countries as well as the Commission of the European Union (EU) and the EU Council Office.¹⁷¹

So what was accomplished by these ground exercises? PSI participants practiced ground interdiction in the familiar realm of static border crossings and airports. The exercises provided a good opportunity to fine-tune joint export control procedures, and important first line of defense in successful interdiction. Troublesome is the fact that these ground exercises have yet to address the in-transit aspect of the PSI. Until the initiative starts focusing its attention on the in-transit phase, the ground exercises are not much more than multinational export control cooperation drills. This does not discount their utility, especially the role of airport security in PSI's air interdiction phase.

3. Maritime Exercises

With an initial and continued focus on the maritime arena, there have been five maritime exercises conducted thus far. The first exercise, *PACIFIC PROTECTOR*, was led by Australia, with participation from the Japan, France, and the United States. Many

¹⁷⁰ "News Archives," Embassy of the Republic of Poland in Washington D.C., http://www.polandembassy.org/News/Biuletyny_news/News_2004/p2004-04-22.htm, last accessed Aug 04..

¹⁷¹ "Press release of the Zollkriminalamt, (31 March 2004)" <http://www.zollkriminalamt.de/gb/press/index2.htm?310304.html>, last accessed Aug 04.

other countries also observed the exercise. In the exercise, a Japanese flagged vessel was intercepted by the Japanese Coast Guard in international waters. The exercise tested the Coast Guard's capability to react quickly to something being thrown overboard. The ship also contained simulated chemical agents so specialist teams were able to do detection training. This exercise highlighted the non-standardization of search and seizure techniques employed by different exercise participants. This exercise also revealed the subtle differences in the way participating countries deploy their forces. These differences included communications and force procedures. The exercise was very much procedural; the emphasis was on interoperability, safety, and professionalism. Overrunning the ship and use of force were not exercised.¹⁷²

After two subsequent maritime exercises, led by French and Spanish agencies respectively, the United States took its turn at center stage with exercise SEA SABER, in January of 2004. Taking place in the Arabian Sea, a key region of proliferation concern, the exercise utilized law enforcement and military assets from twelve of the sixteen PSI partner nations. *SEA SABER* practiced a visit, board, search, and seizure (VBSS) operation. The choreographed exercise tracked a suspicious vessel more than 1,200 miles into the Arabian Sea by a closely coordinated effort of partner ships and aircraft. After permission was granted to board and search the vessel, partnership forces went into action. PSI partners were pleased with exercise results. One glowing report came from Singapore naval officer, Major Kwek Ju-Hon: "We've been doing some fairly complex operations, like crossdeck landings and boarding training, and I think that says a lot for the interoperability of the countries involved in PSI."¹⁷³ The exercise was specifically designed as a cooperative exercise to enhance interoperability among multi-national forces in maritime interdiction operations, and proved successful in accomplishing its planned objectives.

¹⁷² "Media Conference for PSI Exercise," Defense Ministers and Parliamentary Secretary (14 September 2003), <http://www.minister.defence.gov.au/HillTranscripttpl.cfm?CurrentId=3120>, last accessed Aug 04.

¹⁷³ Wes Eplen, "Saturn Poses as WMD Smuggler for Sea Saber '04," *Sealift* (February 2004), <http://www.msc.navy.mil/sealift/2004/February/seasaber.htm>, last accessed Aug 04.

The latest maritime exercise was conducted on 19-22 April 2004. The Italian-led exercise *CLEVER SENTINAL* simulated the interception of a ship carrying WMD in the Mediterranean Sea off the coast of Sicily. The cargo, headed to a potential terrorist organization, was intercepted by a group of Italian Navy Special Forces. After the forces took control of the ship, a chemical, biological and radiological inspection team boarded the ship, found discrepancies with the ship's cargo, and diverted it to Italian Coast Guard, Italian Ministry of Interior, and Italian Fire Department control. Italian fire department personnel then screened the container to detect the nature of the cargo.¹⁷⁴

According to Lieutenant Larry Johnson, a Personnel Exchange Program member from the U.S. Navy, attached to the operation division of the Italian High Seas Commander, "the exercise addressed the short notice, quick response and quick integration of the force and moving forward to find the targets in a complex environment."¹⁷⁵ Lieutenant Johnson may be overstating the exercise contribution a bit. Boarding forces that gave way to inspectors who meticulously searched all cargo then diverted it to other agencies who conducted another long search is far from short notice, quick response.

So what was accomplished by these maritime exercises? The exercises started with a focus on interoperability, practiced the detection, search, and seizure aspects of future interdictions, and began addressing forceful entry procedures in the last exercise. The success of these exercises suggests that PSI interdiction principles are best suited for the maritime arena.

4. Air-interception Exercises

Although three air-interception exercises have been conducted in conjunction with the PSI, public details of exercise objectives and results are few. The first exercise, Air CPX, was led by United Kingdom. The October 2003 exercise was conducted as a tabletop that explored operational issues regarding the interception of air traffic. PSI took exercising air-intercepts a step further in February 2004 with the Italian-led exercise AIR

¹⁷⁴ Stephen Weaver, "Gonzales Participates in Exercise Clever Sentinal," *The Flagship* (29 April 2004), http://www.flagshipnews.com/archives_2004/apr292004_5.shtml, last accessed Aug 04.

¹⁷⁵ Ibid.

BRAKE 04. In addition to Italy, the United States, Portugal, Spain and France contributed to the exercise by providing radar and air defense data to assist in tracking the target aircraft, in this case a U.S. Navy P-3. During the exercise an Italian Air Force F-16 intercepted the P-3.¹⁷⁶ PSI participants further examined the prospect of air-intercepts in June 2004 with the French-led exercise APSE 04, details of which are not available at this time.

So what was accomplished by these air-interception exercises? Exercise participants claim they demonstrated that PSI is about interdiction of proliferation-related trafficking via various modes of transportation, including air. While that is certainly true as far as official PSI rhetoric goes, there is no indication whether the air-interception exercises proved or disproved the effectiveness of the concept.

D. OPERATIONAL CHALLENGES

Ground, maritime, and air PSI exercises continue to stress the importance of interoperability, and WMD detection procedures. Significant challenges to PSI operational effectiveness remain in these areas. Additionally, PSI exercises have yet to address, most likely due to its difficult nature, the challenge of using force when interdicting WMD shipments, especially air-intercepts. These challenges are summarized below.

1. Interoperability

Though unilateral interdiction operations are possible within the context of the PSI, most PSI planning is conducted on the assumption of alliance and coalition operations in scenarios that are difficult to predict and which often arise at short notice. With this in mind, the nature and composition of the interdicting force structure must be specific to requirement and based upon a general and flexible interdiction capability. To achieve this, an assured capability for interoperability of information, tactics and procedures is essential.¹⁷⁷

¹⁷⁶ "Air Brake 04 Concludes," *United States European Command* (20 February 2004), <http://www.eucom.mil/Directorates/ECPA/News/index.htm?http://www.eucom.mil/directorates/ecpa/news/Release/022004.htm&2>, last accessed Aug 04.

¹⁷⁷ "Multilateral Interoperability Programme (31 October 2003)," http://www.mip-site.org/MIP_Specifications/Baseline_1.0/MIPGlos-MIP_Glossary/MIPGlos-CCWG-IT-Edition1.1.pdf, last accessed Aug 04, 1.

The interoperability challenge was addressed as early as the first PSI exercise, and continues to be a formal objective of subsequent training and exercises. Apparent to PSI partners from the start were the international differences in tactics and procedures for stopping, searching, and seizing WMD. According to the U.S. Department of State, interdiction efforts have tended to be ad hoc in the past.¹⁷⁸ Although the PSI can bring multiple countries together into a cooperative interdiction operation, the effort remains largely ad hoc. Countries have not identified dedicated PSI forces. While PSI partners learn and cooperate in exercises, the parties involved in the exercises change. When actual interdictions take place, there is no assurance that the individual parties involved have PSI exercise experience.

The language barrier is another interoperability challenge. Supporting command and control (C2) systems will be required to pass information within and across national and language boundaries. Moreover, tactical C2 information will flow to the operational and strategic levels of command including other governmental departments and non-governmental organizations.¹⁷⁹ Interdicting partners must be able to communicate with one another, and have a mechanism for coordinating with host nations that may not speak the same language.

Global coverage of illegal transports necessitates the presence of equipment, personnel, and standardized reporting procedures in key ports and border crossings. To facilitate this coverage, the United States has been assisting other countries in efforts to combat smuggling operations. From 1992 through 2001, the United States spent \$86 million helping about thirty countries, mostly in the Former Soviet Union and Central and Eastern Europe.¹⁸⁰ The help amounted to radiation detection equipment and training, technical exchanges to promote the development of laws and regulations, and other

¹⁷⁸ "What is the Proliferation Security Initiative," *USINFO.STATE.GOV* (28 August 2004), <http://usinfo.state.gov/products/pubs/proliferation/>, last accessed Aug 04.

¹⁷⁹ "Multilateral Interoperability Programme," 1.

¹⁸⁰ "Nuclear Nonproliferation: U.S. Efforts to Help Other Countries Combat Nuclear Smuggling Need Strengthened Coordination and Planning," *GAO* (May 2002), <http://www.gao.gov/new.items/d02989t.pdf>, last accessed Sep 04, 6.

equipment designed to improve their ability to interdict nuclear smuggling.¹⁸¹ Though U.S. assistance has strengthened the interdiction capability of these countries and has a direct positive impact on PSI operations, serious problems still exist. The lack of oversight and follow-up from the installers has resulted in serious problems with installing, using, accounting for, and maintaining the equipment. To make matters worse, many countries that received the detection equipment are not reporting information about the materials detected by the equipment.¹⁸² Many other PSI partners still lack the necessary equipment and training to effectively influence the interdiction process. Interoperability requires more than a commitment. More commonality regarding materials, procedures, and reporting are required to make the PSI truly interoperable.

2. Detection

The fact that the PSI's signature event, the interdiction of the *BBC China*, is now being evaluated more for what was missed than what was found is evidence of the challenge of detecting WMD weapons and materials. Stopping a suspected trafficker is fruitless without a means to search and detect illicit materials. Inspectors searching for WMD on ships, land vehicles, and grounded aircraft may be faced with searching hundreds of containers. A full search would require off-loading the huge containers and reach-back of some sort. A nuclear device or nuclear components could easily be transported in a ship's cargo hold. Finding the device in the right container could amount to finding a needle in a haystack. Finding biological or chemical agents might prove more challenging than nuclear material detection. For example, Anthrax spores that fill a salt shaker could expose and kill thousands of people before treatment could begin.¹⁸³ A salt shaker on a ship or cargo plane filled with forty foot crates would prove difficult to find.

The challenge of detecting, identifying, and characterizing WMD is not going unnoticed by the U.S. Department of Defense (DoD), Department of Energy (DOE), and

¹⁸¹ Ibid., 2.

¹⁸² Ibid., 15.

¹⁸³ "Detecting WMD Proliferation," *The Office of Defense Nuclear Nonproliferation*, http://www.nnsa.doe.gov/na-20/detect_prolif.shtml, last accessed Aug 04.

intelligence community (IC). The Counterproliferation Program Review Committee (CPRC) recently established Areas for Capability Enhancement (ACEs) for 2004. These ACEs characterize areas where progress is needed to enhance warfighting capabilities. Detection of WMD is found throughout the list of ACE priorities as is interdiction of WMD (see table 4).¹⁸⁴ In order for the PSI to succeed, PSI partners must address these same areas of concern.

| ACE Priorities | | | |
|----------------|-----|----|--|
| DoD | DOE | IC | Areas for Capability Enhancements |
| 1 | 1 | | Timely collection, analysis, and dissemination of strategic, operational, and tactical level actionable intelligence to support CP and CT |
| 2 | 2 | | Detection, identification, characterization, location, prediction, and warning of traditional and nontraditional CW and BW agents |
| 3 | 3 | | Defense against, and detection, characterization and defeat of paramilitary, covert delivery, and terrorist WMD capabilities |
| 4 | 2 | 5 | Detection, location, and tracking of WMD/M and related materials, components, and key personnel |
| 5 | 7 | | Support for maritime, air, ground WMD/M interdiction, including special operations |
| 6 | | | Enable sustained operations in a WMD environment through decontamination, and individual and collective protection |
| 7 | | | Medical protection, training, diagnosis, treatment, and countermeasures against NBC agents, to include surge manufacturing capability and stockpile availability of vaccines, pretreatments, therapeutics and other medical products |

Table 4. 2004 ACE Priorities, from Counterproliferation Program Review Committee

According to a U.S. State Department fact sheet, “PSI does not envision stopping and inspecting every shipment that might involve items that could be used in a WMD- or missile-related proliferation program; rather the United States intends to take action based on solid information.”¹⁸⁵ Even the success of this rather conservative approach to stopping and seizing is limited by the ability of PSI forces to detect the WMD.

3. Air-intercepts

Missing from PSI exercises thus far has been the practice of using military force to interdict suspected WMD cargoes. While force might be used in a non-compliant maritime boarding or an intercept of a ground vehicle, it is likely to take place in a

¹⁸⁴ “Report on Activities and Programs for Countering Proliferation and NBC Terrorism,” Counterproliferation Program Review Committee (May 2004), <http://www.fas.org/irp/threat/nbcterror2004.pdf>, last accessed Sep 04, 3.

¹⁸⁵ “Proliferation Security Initiative Frequently Asked Questions (FAQ),” U.S. State Department (24 May 2004), <http://www.state.gov/t/np/rls/fs/32725.htm>, last accessed Aug 04.

controlled environment such as a naval blockades, ports, or border crossings. This provides PSI participants with the luxury of searching for WMD while the vessel is stopped, or while on-board. In addition, PSI forces would be given ample time to concentrate resources in the area of concern. Assessing the WMD threat while on-board, and concentration of coalition forces is less applicable to air-intercepts. A non-compliant aircraft, suspected of carrying WMD, over sovereign airspace, leaves the host nation with three choices: allow passage, escort through landing, or shoot-down. The decision to shoot-down, based on even the most reliable intelligence, is a risky proposition.

In early 1994 the United States proposed a plan to provide radar-tracking and target-vectoring information to South American governments to facilitate the intercept of suspected drug-carrying aircraft. A number of U.S. aviation organizations, including the Aircraft Owners and Pilot Association (AOPA) opposed the idea, but the proposal was nevertheless adopted by a number of countries. While there are no numbers available as to the deterrent factor of the agreement, the AOPA's concerns played out on 20 April 2001. On that date, Peruvian Cessna A-37Bs, armed versions of the Air Force T-37 trainer, using tracking information provided by U.S. aerial surveillance, shot down an unarmed Cessna 185 cruising suspected of running drugs. Tragically, the aircraft was not involved in the transport of drugs, but was filled with missionaries working for the Association of Baptists for World Evangelism.¹⁸⁶ In the wake of the downing of the Cessna 185, organizations such as AOPA have called on the International Civil Aviation Organization (ICAO) and individual countries to reconsider rules allowing use of force against civil aircraft, reminding the ICAO of the unanimous decision of its members, following the shoot-down of Korean Air Lines Flight 007 (a 747) in 1984, that "every state must refrain from resorting to the use of weapons against civil aircraft in flight."¹⁸⁷

New York, Chicago, and Montreal Conventions established that aircraft cannot be forced down unless they pose an imminent threat.¹⁸⁸ How imminent is the threat of a box

¹⁸⁶ Kirby Harrison, "Shootdown of floatplane is warning signal for GA," *Aviation International News* (June 2001), http://www.ainonline.com/issues/06_01/june_01_shootdownpg3.html, last accessed Aug 04.

¹⁸⁷ Ibid.

¹⁸⁸ Interviews with officials in the U.S. Office of Secretary of Defense.

of centrifuges, a vile of biological agents, or dangerous chemicals? Even if the material is found, justifying the intercept, the question of intended use still remains. When PSI interception forces are faced with the decision to shoot down a suspected WMD trafficker, they must be aware of the consequences of making a mistake. Even if intelligence is reliable, and the interdicted aircraft was carrying WMD-related materials, the burden of proof would remain with the interdictor.

Directing an aircraft to a place where it has to come down is an alternative air-interception option. When interdicting aircraft, time is an ally, and it is an advantage to string out the problem. As long as the aircraft can be tracked, it will eventually need to land. Aircraft escort is less effective in situations where intelligence suggests WMD will be released from on-board the aircraft. Escort is also not possible in all cases. There are times when the trafficking aircraft may be flying too high or too fast to be caught and escorted to the ground.

E. OVERCOMING OPERATIONAL CHALLENGES

1. Overcoming the Interoperability Challenge

While the PSI has taken steps in addressing the interoperability challenge through exercises and training, the challenge has yet to be attacked head-on. Attacking the interoperability challenge must start with the procedural familiarity of the forces involved in interdiction activities. PSI partners can take a page from the DEA's book by creating dedicated PSI interdiction forces from each core member. These PSI forces would provide continuity to training, exercises, and operations.

The Mobile Enforcement Team (MET) program was created by the DEA in early 1995 as a response to the overwhelming problem of drug-related violent crime, increasing sophistication of drug-trafficking organizations, and the availability of automatic weapons that make drug law enforcement more difficult and dangerous than ever before. With police departments facing these challenges with smaller budgets and fewer police officers, the MET program helps local law enforcement entities attack the problem by:

- Identifying major drug traffickers and organizations that commit homicide and other violent crimes;

- Collecting, analyzing, and sharing intelligence with state and local counterparts;
- Cultivating investigations against violent drug offenders and gangs;
- Arresting drug traffickers and assisting in the arrests of violent offenders and gangs;
- Seizing the assets of violent drug offenders and gangs;
- Providing support to federal, state, and local prosecutors.¹⁸⁹

When local police chiefs, county sheriffs, and state and local prosecutors feel that there is a need for MET assistance in their jurisdiction they can submit a written request to the DEA Special Agent in Charge responsible for their particular area. Upon acceptance of a request, the MET in that jurisdiction sends a pre-deployment assessment team to meet with the requesting official and other cooperating local law enforcement agencies in order to evaluate the problem. The entire MET is then deployed to that city to begin investigative activity against the primary drug trafficking individuals and organizations identified in the pre-deployment assessment. Upon completion of the MET-assisted operation, DEA officials meet with representatives of the requesting agency to evaluate the long-term success of the operation. Assaults, homicides, and robberies have all greatly decreased as a result of MET deployments.¹⁹⁰

PSI partners should use the concept demonstrated by the MET to minimize interoperability challenges. Due to intelligence sharing and legal constraints, a multinational combined PSI interdiction team would most likely be out of the question, but dedicated PSI forces could accomplish help overcome the interoperability challenge. The first step would be identification of personnel and equipment to be used by each PSI participant in the event of a joint interdiction operation. Second, the personnel and

¹⁸⁹ “Integrated Drug Enforcement Assistance.”

¹⁹⁰ Ibid. As of April 1, 2002, the DEA had received 450 requests for MET deployments nationwide. Pursuant to these requests, a total of 339 deployments have been completed. These deployments have made a significant impact in neighborhoods across the United States. In areas where the DEA has deployed METs, assaults have been reduced by 15 percent, homicides by 14 percent, and robberies by 16 percent. METs have also contributed to the overall national decrease in violent crime: from 1993 to 1999 the number of violent crimes committed in the United States dropped by 26 percent.

equipment would be utilized in training and exercises among PSI partners. This would build continuity within the joint interdiction process and trust between PSI contributors. Third, these PSI dedicated forces would establish joint operational plans, tactics, and communication mechanisms common to all coalition partners, that would be utilized in the event of an interdiction involving more than one PSI participant. Fourth, these forces would become familiar with standardized detection and screening technology that would eventually need to be shared by all PSI supporters. Establishing dedicated PSI forces would take PSI interoperability from the rhetoric to the action stage.

2. Overcoming the Detection Challenge

The key to overcoming PSI's detection challenge is industry involvement. Technological advances in container control and detection systems will enable PSI interdiction teams to find the needle in a haystack that they are looking for. Containers can be tampered with any point in the shipping process. According to Stephen Flynn, a former Coast Guard commander, "Right now, there is no way we can actually verify from a security standpoint that what is loaded into the container at the starting point is really in there."¹⁹¹ To combat this challenge a smart box cargo container is being developed by U.S. industry. This container will electronically provide its location, indicate if it has been tampered with, sense biological, chemical or radioactive agents, and describe the type of cargo packed inside. A first-generation model of this container is already in use at some foreign ports. The next phase container will communicate its location using a satellite tracking system, the internet, or a system that employs cell phone like technology. The cost of these containers is \$700 to \$1200 more than a standard cargo box.¹⁹² Replacing old cargo containers with new smart boxes would greatly enhance PSI interdiction operations. PSI participants would incur the costs of the new containers, and would need to budget appropriately. Augmenting the container technology are better detection systems, currently under development by U.S. industry.

¹⁹¹ Paul Wilborn, "Seeing Through Steel Containers," *Daily Journal* (12 May 2003), <http://www.google.com/search?hl=en&ie=UTF-8&q=seeing+through+steel+containers>, last accessed Aug 04.

¹⁹² Ibid.

Before revolutions in genomics, biotechnology, microengineering, and microcomputers, detection of biological agents could only be done in laboratories, taking days to weeks. Soon, technological advances, many of them being made at Lawrence Livermore Laboratories, will make possible rapid, accurate, and sensitive biodetectors.¹⁹³ Similar advances in nuclear and chemical agent technology also exist, with several industry partners making significant advances. PSI interdiction teams equipped with state of the art detection equipment would be given the best chance to find any WMD reported aboard the intercepted vessel. Again, this equipment would not come without a cost to PSI partners. Funds for this equipment must be set aside by the United States and other PSI core members, put into an international fund dedicated to PSI operations.

3. Overcoming the Air-intercept Challenge

As PSI participants begin to look deeply into the prospects of air-intercepts, it is necessary re-address the likelihood of success. There is no easy answer to the challenge of using force during an air-intercept. While shooting-down a suspect WMD carrier is not prudent, allowing proliferators free reign of the skies is even less sensible. The best way to attack the air-interception challenge is from the ground. While PSI participants can continue to practice air-intercepts, airport security and customs exercises such as HAWKEYE would prove more worthwhile in the long-run. Careful screening of cargo and personnel with technologically advanced systems prior to take-off will avert many of the potential intercept situations. Additionally, using the “what goes up must come down” principle, aircraft tracking systems and ground forces from the PSI’s sixty-plus supporting nations must be ready to meet these aircraft on the ground once they land.

F. CONCLUSION

When intelligence is reliable and legal justification is available, PSI operations are expected to be successfully conducted. In the way of this success are interoperability, detection, and use of force challenges. Although interdiction operations are not a new response to the proliferation challenge, overcoming PSI operational challenges will

¹⁹³ “Reducing the Threat of Biological Weapons,” www.llnl.gov/str/Milan.html, last accessed Aug 04. A miniature flow cytometer (known as miniflo) uses an immunoassay system to look at the proteins and other material on the surface of cells, and a portable PCR (polymerase chain reaction) unit identifies the DNA inside the cell.

require new ways of thinking about the PSI force structure, new funding streams to secure detection technology necessary to find WMD, and a new approach to address the use of force during air-intercepts. PSI interdiction principles, established a year ago, are said to have stood the test of time. Closer to the truth may be the fact that they have not been truly tested at all.

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V. CONCLUSION

A. PSI REPORT CARD

The research conducted in preparation of this thesis spurred development of a first year report card for the PSI. The report card is a reflection of PSI performance against expectations addressed in this thesis.

1. Expectations

Table 5 lists expectations for PSI effectiveness. They are pulled from established information sharing guidelines and interdiction principles and filtered through technological, political, and process limitations.

| AREA | EXPECTATION |
|---|--|
| Contribution to Nonproliferation Regime | Fill the gap between treaty-based nonproliferation and more assertive counterproliferation measures |
| International Support | Global support of interdiction principles, focusing on non-state actors and countries of proliferation concern |
| Exercises | Portray the operational image of the PSI; improve interoperability of coalition forces; provide realistic training scenarios for PSI partners; address all aspects of potential PSI interdictions |
| Intelligence | Improve suspect procedures leading to intelligence failures in Iraq; achieve a level of assurance of intelligence reliability commensurate with the decision to use force; institute a high level of information sharing in accordance with information sharing guidelines |
| Legal | Legally justify stopping, searching, seizing materials, or destroying in-transit vessels suspected of transporting WMD upon a decision to interdict |
| Operational | Cooperatively and successfully interdict WMD shipments upon receipt of highly reliable intelligence and legal jurisdiction in accordance with established interdiction principles |

Table 5. PSI Expectations

2. Performance

The PSI concept effectively fills a gap in WMD nonproliferation efforts. Still, significant challenges to PSI effectiveness exist in most areas, with intelligence challenges being foremost. A PSI report card is provided in Table 6, highlighting the scope of these challenges.

| AREA | RED | YELLOW | GREEN | COMMENTS |
|---|-----|--------|-------|---|
| Contribution to Nonproliferation Regime | | | X | The initiative is fostering a norm to stop transfers and transactions of WMD programs. The PSI triggers deterrence by denial by combining capabilities of partner nations. Finally, it takes disparate national efforts to interdict WMD shipments and gives them a unified multilateral structure. |
| International Support | | X | | Since its May 2003 inception, the PSI resume includes 7 international meetings, 15 core members, and over 60 supporters for its interdiction principles. Lack of Chinese support remains a hurdle to international acceptance of the initiative. Failure to bring China aboard will impede future efforts to secure a PSI-specific UNSCR for the PSI, and will continue to free trafficking lanes for North Korea. |
| Exercises | | X | | The exercises, initially scheduled as public relations tools, enhance the operational image of the PSI. The exercises continue to focus on the interoperability of interdicting agencies and detailed search and detection operations, but mostly in a static environment. Exercises have been marginally effective because they have not fully tackled the use of force, especially in air-intercepts, and they have relied on watered-down exercise scripts due to intelligence sharing restrictions. |

| | | | | |
|---------------------|----------|----------|--|--|
| Intelligence | X | | | Sharing intelligence is the biggest and most controversial challenge to PSI effectiveness. Sharing restrictions also affect training and exercises, requiring watered-down intelligence cooperation. The Cold War reliance on satellite technology and a lack of human intelligence sources creates an intelligence collection challenge for the PSI. Poor intelligence estimates of Iraq's WMD program enhance distrust for U.S. and British intelligence services and challenge the credibility of future PSI intelligence assessments. |
| Legal | | X | | The UN LOS Convention, UN Charter Article 51, UNSCR 1540, and the UNSC Presidential Statement of 1992 all hint at the importance of stopping WMD proliferators, but none specifically justify offensive interdiction operations as prescribed by PSI interdiction principles. |
| Operational | | X | | Differences in tactics and procedures for stopping, searching, and seizing WMD abound from one PSI partner to another. The language barrier and technological differences in detection capabilities among PSI participants also hampers PSI interoperability. The difficulty finding WMD once suspected is another operational challenge. Firepower is not the issue for PSI operations, enough military capability and global coverage exists to conduct interdiction operations. Proportional use of this force, especially in air-intercept operations remains a challenge. |

Table 6. PSI Report Card

B. MAKING THE GRADE

In order for PSI participants to bring home a better report card next year, action is needed to address challenge areas. Recommended short-term fixes, long-term solutions, and concepts worth exploring, designed to address PSI challenges, are described below. These recommendations fit into two general categories: organize the activity and fill current gaps.

1. Organize the Activity

Since its inception, the PSI has been described as an activity not an organization. While the action-oriented initiative has done well to avoid bureaucratic stagnation, some organization is needed to attack PSI challenges.

a. Fund the Initiative (Short-term Fix)

The key to overcoming PSI's detection challenge is industry involvement. Technological advances in container control and detection systems will enable PSI interdiction teams to find the needle in a haystack that they are looking for. PSI participants must be ready to budget for and incur the costs the new containers and detection devices currently being developed and tested by industry. This will necessitate central or dedicated funding for the PSI within participating countries, or as part of a coalition funding line. The first step for U.S. PSI support agencies would be the creation of program element for the PSI and establishment of funding lines for PSI-related equipment, technology, training, and exercises. Taking this step would help validate the initiative as more than a temporary presidential focus area.

b. Establish Dedicated PSI Forces (Long-term Solution)

Addressing operational challenges must start with the procedural familiarity of the forces involved in interdiction activities. PSI partners can take a page from the DEA's book by creating dedicated PSI interdiction forces similar to the DEA's Mobile Enforcement Team that would provide continuity to training, exercises, and operations. PSI partners should use the concept demonstrated by the MET to minimize interoperability challenges. The first step would be identification of personnel and equipment to be used by each PSI participant in the event of a joint interdiction operation. Second, the personnel and equipment would be utilized in training and exercises among PSI partners. This would build continuity within the joint interdiction process and trust between PSI contributors. Third, these PSI dedicated forces would establish joint operational plans, tactics, and communication mechanisms common to all coalition partners, that would be utilized in the event of an interdiction involving more than one PSI participant. Fourth, these forces would become familiar with standardized detection and screening technology that would eventually need to be shared by all PSI supporters.

Establishing dedicated PSI forces would take PSI interoperability from the rhetoric to the action stage.

c. Establish a Trusted Information Network (Idea Worth Exploring)

Intelligence sharing challenges can be potentially overcome by replacing existing hub-and-spoke information databases with a PSI trusted information network. Under this concept, intelligence agencies of PSI partners would still have their own databases, but they would be searchable across PSI participants. Secrets would be protected through the design of the network and an information rights management approach that controls access to data, not access to the whole network. The technology needed to adopt such a concept exists. Adopting such a network would minimize many of the intelligence challenges facing PSI partners. First, the network would maximize collection capabilities by combining available technical data with human intelligence from PSI collectors across the globe. Second, the network would facilitate a high degree of intelligence sharing among PSI partners, widening sharing from a bilateral to a multilateral basis. Third, the network would inherently build trust in the intelligence shared through it. Finally, this network would be an integral part of PSI exercises and training, thus allowing PSI partners to have a consistent mechanism for sharing intelligence.

A trusted information network would require a governing body responsible for the planning, resources, and enforcement of information sharing guidelines. NATO appears to be a good choice to test the concept. During the June 2004 Istanbul summit, NATO leaders established the Terrorist Threat Intelligence Unit, created after the September 11 attacks, as the permanent body under which this intelligence sharing takes place. A NATO-administered trusted information network would require the insertion of an additional article into the North Atlantic Charter, formalizing intelligence and law enforcement cooperation as well as institutionalizing cooperation and intelligence-sharing. In addition, NATO would be required to act as the network's watch-dog, quickly punishing breaches of established information sharing procedures. A PSI-specific trusted information network that accounts for non-NATO PSI participants would be a logical follow-on to the NATO network.

2. Fill Current Gaps

To overcome challenges to PSI effectiveness, gaps must be filled. Filling operational gaps, international support gaps, and legal gaps will improve overall PSI effectiveness.

a. Fill Operational Gap (Short-term Fix)

PSI participants must start moving from low-hanging fruit to the harder to reach areas. Answering the hard questions must start with exercises and training and extend to rethinking the likeliness of air-interception of WMD traffickers. PSI exercises have yet to address, most likely due to its difficult nature, the challenge of using force when interdicting WMD shipments. Ground exercises must start addressing the in-transit aspect of the PSI. Until the initiative starts focusing its attention on its regularly advertised in-transit phase, the ground exercises are not much more than multinational export control cooperation drills. Maritime exercises must continue to address forceful entry procedures first practiced in the last PSI maritime exercise. The best way to attack the air-interception challenge is from the ground. While PSI participants can continue to practice air-intercepts, airport security and customs exercises would prove more worthwhile in the long-run. Careful screening of cargo and personnel with technologically advanced systems prior to take-off will avert many of the potential intercept situations.

b. Fill the International Support Gap (Short-term Fix)

North Korea, a main target of the PSI, has shipped missile and nuclear technology and is reportedly working to combine these technologies. Chinese participation in the PSI would greatly enhance the Asian interdiction effectiveness, and provide an added factor to the cost / benefit analysis of the North Koreans. The United States needs to take a proactive role in assisting Chinese efforts to implement its new export control regulations, shape Beijing perspectives on nonproliferation by engaging in strategic dialogue, and encourage Chinese membership in the PSI. After gaining Russian support, the U.S. State Department is now rightly focusing on China. Chinese support of PSI interdiction principles would allow the initiative to balance its individual strengths with internationally recognized justification through the support of UNSC.

b. Fill the Legal Gap (Long-term Solution)

Chinese support would clear some current obstacles to a PSI-specific UNSCR. A UNSCR represents the best chance for the across-the-board PSI legal legitimacy. While UNSCR 1540 acknowledges the need for better legal and regulatory frameworks to prevent illicit trafficking to non-state actors, it does specifically add legal justification for PSI interdictions. A UNSCR authorizing these interdictions would provide blanket legal authority for the PSI. Even with Chinese support, adopting this resolution will be difficult given that there is nothing in the UN Charter that gives the Security Council the specific authority to adopt global legislation for WMD interdiction.

C. BOTTOM LINE

The interdiction of the *BBC China* serves as the highpoint in the PSI's short existence. Prospects for future WMD interdictions are largely dependent on overcoming intelligence, legal, and operation challenges to PSI effectiveness. These challenges are not unconquerable, but will require some organization, some revolutionary thinking, some gap-filling, and some funding. Even if these challenges are overcome, the PSI will never stop all WMD trafficking, but it will be a great first start.

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